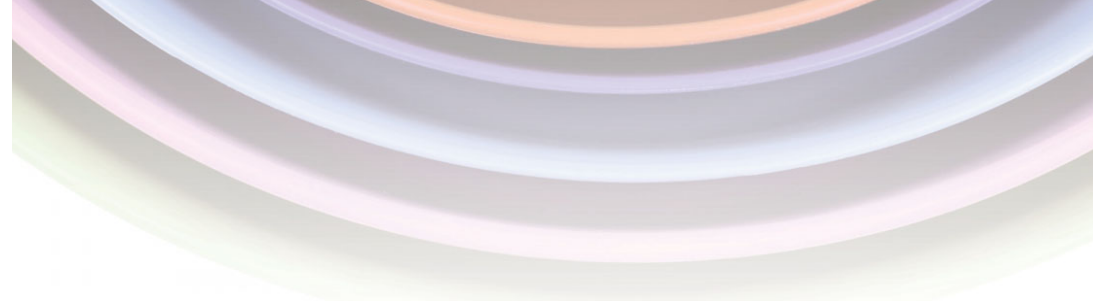




Part Four

In Part Four we will explore areas that transcend the quantitative/qualitative distinction. Chapter 26 invites readers to consider how useful the distinction is. This may seem a contrary thing to do, since the book has been organized around the quantitative/qualitative divide. However, the aim is to show that the distinction is not a hard-and-fast one. Chapter 27 considers the different ways in which quantitative and qualitative research can be combined. Such combinations are referred to as *mixed methods research*. Chapter 28 considers the growing possibilities for e-research and focuses on the use of the Internet both as a source of data and as a research method. Chapter 29 examines issues relating to the writing-up of social research and explores some features of good writing in both quantitative and qualitative research and mixed methods research.

These chapters draw together certain issues from previous parts but also address others that have been raised already but this time are discussed in much greater depth.

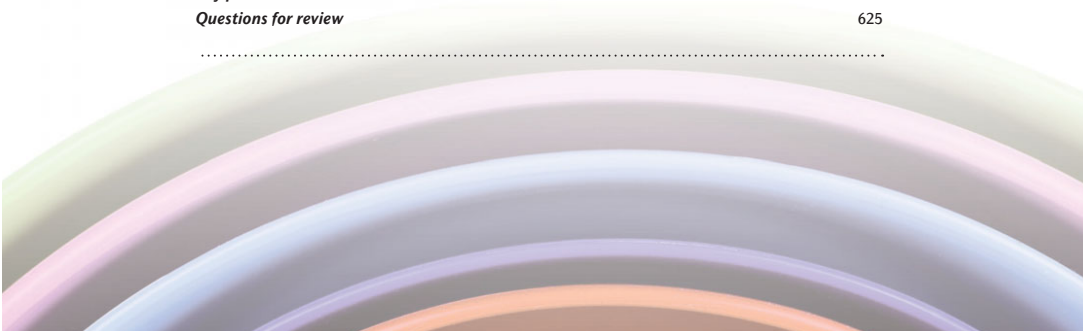
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26

Breaking down the quantitative/qualitative divide

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Chapter guide

This chapter is concerned with the degree to which the quantitative/qualitative divide should be regarded as a hard-and-fast one. It shows that, while there are many differences between the two research strategies, there are also many examples of research that transcend the distinction. One way in which this occurs is through research that combines quantitative and qualitative research, which is the focus of the next chapter. The present chapter is concerned with points of overlap between them. This chapter explores:

- aspects of qualitative research that can contain elements of the natural science model;
- aspects of quantitative research that can contain elements of interpretivism;
- the idea that research methods are more independent of epistemological and ontological assumptions than is sometimes supposed;
- ways in which aspects of the quantitative/qualitative contrast sometimes break down;
- studies in which quantitative and qualitative research are employed in relation to each other, so that qualitative research is used to analyse quantitative research and vice versa;
- the use of quantification in qualitative research.

Introduction

With this book structured so far around the distinction between quantitative and qualitative research, it might appear perverse to raise at this stage the prospect that the distinction might be overblown. The distinction has been employed so far for two main reasons.

1. There *are* differences between quantitative and qualitative research in terms of research strategy, and many researchers and writers on research methodology perceive this to be the case.
2. It is a useful means of organizing research methods and approaches to data analysis.

However, while epistemological and ontological commitments may be associated with certain research methods—such as the often-cited links between a natural science epistemology (in particular, positivism) and social survey research, or between an interpretivist epistemology (for example, phenomenology) and qualitative interviewing—the connections are not deterministic. In other words, while qualitative interviews may often reveal a predisposition towards or a reflection of an interpretivist and constructionist position, this is not always the case, as an early example suggested (see the discussion of the study by Adler and Adler 1985 in Chapter 2).

This means that the connections that were posited in Chapter 2 between epistemology and ontology, on the one hand, and research method, on the other, are best thought of as tendencies rather than as definitive connections. Such connections were implied by the suggestion that within each of the two research strategies—quantitative and qualitative—there is a distinctive mix of epistemology, ontology, and research methods (see Table 2.1). However, we cannot say that the use of a structured interview or self-completion questionnaire *necessarily* implies a commitment to a natural scientific model or that ethnographic research *must* mean an interpretivist epistemology. We should not be surprised at this: after all, quantitative research teaches us that it is rarely the case that we find perfect associations between variables. We should not be surprised, therefore, that the practice of social research similarly lacks absolute determinism.

Research methods are much more free-floating than is sometimes supposed. A method of data collection like participant observation can be employed in such a way that it is in tune with the tenets of constructionism, but equally it can be used in a manner that reveals an objectivist orientation. Also, it is easy to under-emphasize the significance of practical considerations in the way in

which social research is conducted (though look again at Figure 2.3). Conducting a study of drug-dealers by postal questionnaire may not be totally impossible, but it is unlikely to succeed in terms of yielding valid answers to questions.



The natural science model and qualitative research

One of the chief difficulties with the links that are frequently forged between issues of epistemology and matters of research method or technique is that they often entail a characterization of the natural sciences as necessarily or inherently positivist in orientation. There are three notable difficulties here.

1. There is no agreement on the epistemological basis of the natural sciences. As noted in Chapter 2, positivism is but one version of the nature of the natural sciences, *realism* being one alternative account (Bhaskar 1975).
2. If we assume that the practices of natural scientists are those that are revealed in their written accounts of what they do (and most of the discussions of the nature of the natural sciences do assume this), we run into a problem because studies by social researchers of scientists' practices suggest that there is often a disparity between their work behaviour and their writings. It is useful to recall in this connection the research by Gilbert and Mulkay (1984) cited in Chapter 22 (see the section on 'Uncovering interpretative repertoires'), which suggested that the ways in which scientists talked about their work frequently revealed a different set of practices from those inscribed in their articles.
3. As Platt (1981) has argued, a term like 'positivist' has to be treated in a circumspect way, because, while it does refer to a distinctive characterization of scientific enquiry (see Key concept 2.2), it is also frequently employed in a polemical way. When employed in this manner, it is rarely helpful, because the term is usually a characterization (a negative one) of the work of others rather than of one's own work.

Quite aside from the difficulty of addressing the natural science model and positivism, there are problems with associating them solely with quantitative research. Further, qualitative research frequently exhibits features

In the rest of this chapter I will examine a variety of ways in which the contrast between quantitative and qualitative research should not be overdrawn.

that one would associate with a natural science model. This tendency is revealed in several ways:

- *Empiricist overtones.* Although empiricism (see Key concept 2.1) is typically associated with quantitative research, many writers on qualitative research display an equal emphasis on the importance of direct contact with social reality as the springboard for any investigation. Thus, writers on qualitative research frequently stress the importance of direct experience of social settings and fashioning an understanding of social worlds via that contact. The very idea that theory is to be grounded in data (see Chapter 24) seems to constitute a manifesto for empiricism, and it is unsurprising, therefore, that some writers claim to detect 'covert positivism' in qualitative research. Another way in which empiricist overtones are revealed is in the suggestion that social reality must be studied from the vantage point of research participants but that the only way to gain access to their interpretations is through extended contact with them, implying that meaning is accessible to the senses of researchers. The empiricism of qualitative research is perhaps most notable in conversation analysis, which was examined in Chapter 22. This is an approach that takes precise transcriptions of talk as its starting point and applies rules of analysis to such data. The analyst is actively discouraged from engaging in speculations about intention or context that might derive from an appreciation of the ethnographic particulars of the social setting.
- *A specific problem focus.* As noted in Chapter 17 in connection with the research by Hammersley et al. (1985), qualitative research can be employed to investigate quite specific, tightly defined research questions of the kind normally associated with a natural science model of the research process.
- *Hypothesis- and theory-testing.* Following on from the last point, qualitative researchers typically discuss

hypothesis- and theory-testing in connection with hypotheses or theories generated in the course of conducting research, as in analytic induction or grounded theory. However, there is no obvious reason why this cannot occur in relation to previously specified hypotheses or theories. In fact, one of the best-known and most frequently cited articles on participant observation was written to show how to design a study using this method, 'which seeks to discover hypotheses as well as to test them' (Becker 1958: 652). The somewhat infamous research by Festinger et al. (1956) on a millenarian religious cult is a classic study that used participant observation, a technique associated with qualitative research, to test a theory. The theory had to do with the ways in which people respond when a belief that they zealously endorse is disconfirmed. The authors argued that it is possible to imagine a number of conditions that, if met, could result in the belief being held *more* fervently than previously after the belief had been shown to be flawed. When the authors learned of a local religious cult that believed that the end of the world was imminent, they felt that this group would provide an ideal opportunity for finding out how people respond to the falsification of a cherished belief. The researchers and some hired observers pretended to be converts and became members of the group. This membership afforded the opportunity for first-hand observation of levels of conviction and commitment among the cult's adherents and therefore for testing the theory. Clearly assuming that the prediction would not in fact come true, the researchers gathered data before the fateful day about members' levels of conviction and behaviour and then afterwards on their adaptation to the thwarted prophecy. It should be noted that this research violates certain ethical principles that were addressed in Chapter 6.

- **Realism.** Realism (Key concept 2.3) is one way in which the epistemological basis of the natural sciences has been construed. It has entered into the social sciences in a number of ways, but one of the most significant of these is Bhaskar's (1989) notion of **critical realism**. This approach accepts neither a constructionist nor an objectivist ontology and instead takes the view that the 'social world is reproduced and transformed in daily life' (Bhaskar 1989: 4). Social phenomena are

produced by mechanisms that are real, but that are not directly accessible to observation and are discernible only through their effects. For critical realism the task of social research is to construct hypotheses about such mechanisms and to seek out their effects. Critical realists occupy a middle position between positivism and postmodernism by claiming that an entity can exist independently of our knowledge of it, while also asserting that access to the social world is always mediated and thus subjective. Critical realists also believe in the notion of material entities that are said to be real if they have an effect on behaviour. In addition to the empirical domain of observable events, there is a real domain 'in which generative mechanisms capable of producing patterns of events reside' (Tsang and Kwan 1999: 762). Porter's (1993) critical realist ethnography is interesting in this connection (see Research in focus 26.1), because it demonstrates the use of ethnography in connection with an epistemological position that derives from the natural sciences. It also relates to the previous point in providing a further illustration of hypothesis-testing qualitative research.

In addition, writers on qualitative research sometimes distinguish stances on qualitative research that contain elements of both quantitative and qualitative research. R. L. Miller (2000), in connection with an examination of life history interviews (see Chapter 20), distinguishes three approaches to such research. One of these, which he calls 'neo-positivist', uses 'pre-existing networks of concepts... to make theoretically based predictions concerning people's experienced lives' (R. L. Miller 2000: 12). Therefore, one approach to the life history method, which is associated with qualitative rather than quantitative research, would seem to entail a theory-testing approach to the collection and analysis of qualitative data. A further illustration is Charmaz's (2000) suggestion that two approaches to grounded theory can be distinguished: objectivist and constructionist (she uses the term 'constructivist'). She argues that, in spite of the differences that developed between Glaser (1992) and Strauss (e.g. Strauss and Corbin 1998), both held to the view of an objective, external reality. In other words, in the eyes of both the major writers on grounded theory, there is a social world beyond the researcher, whose job it is to reveal its nature and functioning.



Research in focus 26.1

Critical realist ethnography

A critical realist stance was employed by Porter (1993, 2002) in connection with an ethnographic study in a large Irish hospital in which the author was employed for three months as a staff nurse. Porter's interest was in the possible role of racism in this setting. He suggests that racism and professionalism were in operation such that the latter tempered the effects of the former in the context of interactions between doctors and nurses. Thus, racism and professionalism were conceptualized as generative structures—that is, mechanisms—that could be productive of certain kinds of effect. Two hypotheses were proposed: racism would play some part in the relationships between white staff and those from 'racialized minorities' and the 'occupational situation would affect the way in which racism was expressed' (Porter 1993: 599). Porter found that racism was not a significant factor in relationships between members of racialized minorities and the other staff. However, racism did manifest itself behind the backs of the racialized minorities in the form of racist remarks. Racism did not intrude into work relationships, because of the operation of the greater weight given to people's achievements and performance (such as qualifications and medical skills) rather than to their ascriptive qualities (that is, 'race') when judging members of professions. The emphasis on values associated with professionalism counteracted the potential role of those associated with racism. In part, this was due to the way in which black or Asian doctors made a point of emphasizing their knowledge and qualifications during interaction so that their professional credentials were confirmed. Thus, 'racism can be seen as a tendency that is realised in certain circumstances, but exercised unrealised in others' (Porter 1993: 607). In terms of critical realism, one possible structural mechanism (racism) was countered by the operation of another structural mechanism (professional ideology). On certain occasions, the tension between these two mechanisms would surface—for example, when a Muslim doctor proceeded to conduct his religious observances on his knees in the middle of a hospital unit (Porter 2002).



Quantitative research and interpretivism

Qualitative research would seem to have a monopoly of the ability to study meaning. Its proponents essentially claim that it is only through qualitative research that the world can be studied through the eyes of the people who are studied. As Platt (1981: 87) observes, this contention seems rather at odds with the widespread study of attitudes in social surveys based on interviews and questionnaires. In fact, it would seem that quantitative researchers frequently address meanings. An example is the well-known concept of 'orientation to work' associated with the *Affluent Worker* research in the 1960s, which sought to uncover the nature and significance of the meanings that industrial workers bring with them to the workplace (Goldthorpe et al. 1968). Similarly, survey research by Stewart et al. (1980: 112) showed that clerks should not be treated as a unitary category and that 'the *meaning* of clerical work will not be the same for all engaged in it' (emphasis added).

The widespread inclusion of questions about attitudes in social surveys suggests that quantitative researchers

are interested in matters of meaning. It might be objected that survey questions do not really tap issues of meaning because they are based on categories devised by the designers of the interview schedule or questionnaire. Two points are relevant here. First, in the absence of respondent validation exercises, the notion that qualitative research is more adept at gaining access to the point of view of those being studied than quantitative research is invariably assumed rather than demonstrated. Qualitative researchers frequently claim to have tapped into participants' worldviews because of, for example, their extensive participation in the daily round of those they study, the length of time they spent in the setting being studied, or the lengthy and intensive interviews conducted. However, the explicit demonstration that interpretative understanding has been accomplished—for example, through respondent validation (see Key concept 17.3)—is rarely undertaken. Second, if the design of attitude questions is based on prior questioning that seeks to bring out the range of possible attitudinal positions

on an issue, as in the research discussed in Research in focus 11.3, attitudinal questions may be better able to gain access to meaning.

Also, as Marsh (1982) has pointed out, the practice in much survey research of asking respondents the reasons for their actions implies that quantitative researchers are frequently concerned to uncover issues of meaning. For example, she cites Brown and Harris's (1978) research, which was based on a social survey, on the relationship between critical life events (such as loss of a job, death

of husband) and depression. In this research, exploring the meaning of critical life events for respondents was a notable feature of the questioning. As Marsh (1982: 115) puts it, 'it is the *meaning* that these events have for the subjects that gives them their causal force in provoking an onset' (emphasis added). Examples such as these further point to the possibility that the gulf between quantitative and qualitative research is not as wide as is sometimes supposed.



Quantitative research and constructionism

It was noted in Chapter 2 that one keynote of constructionism is a concern with issues of representation, as these play an important role in the construction of the social world. Qualitative content analysis has played an important role in developing just such an understanding, just as discourse analysis has in relation to the social construction of events and meanings in newspaper reports and television programmes. However, it is easy to forget that conventional quantitative content analysis can also be useful in this way.

Lantz and Booth's (1998) research on the social construction of breast cancer (see Research in focus 2.7) provides an example of its use. As Research in focus 2.7 makes clear, much of their understanding of the representation of breast cancer derived from a qualitative content analysis of magazine articles, but they also employed a quantitative content analysis. For example, a content analysis of the photographs of women linked to each article revealed that 80 per cent are apparently of women who are below the age of 50. Also, 85 per cent of the

anecdotes and case stories related to women in this age group. This emphasis on younger women creates the impression that this is the age group that is at risk. This finding allowed Lantz and Booth to make an interesting connection between relative youth and lifestyles and behaviour that are conducive to breast cancer and that therefore is consistent with the 'blame the victim' theme that is conveyed (see Research in focus 2.7). In fact, fewer than 20 per cent of new cases of breast cancer are in women under 50, and the mean age at diagnosis is 65. Thus, the quantitative content analysis of the articles in terms of the ages of the women who are focused upon is inconsistent with the actual age of women when first diagnosed with the disease. In this way, content analysis played an important part in revealing the social construction of breast cancer.

More generally, this example shows how quantitative research can play a significant role in relation to a constructionist stance.



Research methods and epistemological and ontological considerations

If we review the argument so far, it is being suggested that:

- there are differences between quantitative and qualitative research in terms of their epistemological and ontological commitments, *but*
- the connection between research strategy, on the one hand, and epistemological and ontological commitments, on the other, is not deterministic. In other words, there is a *tendency* for quantitative and qualitative research to be associated with the epistemological

and ontological positions outlined in Chapter 2 (for example, in Table 2.1), but the connections are not perfect.

However, some writers have suggested that research methods carry with them a cluster of epistemological and ontological commitments such that to elect to use a self-completion questionnaire is more or less simultaneously and inevitably to select a natural science model and an objectivist worldview. Similarly, the use of participant observation is often taken to imply a commitment to interpretivism and constructionism. Such a view implies that research methods are imbued with specific clusters of epistemological and ontological commitments and can be seen in comments of the following kind: 'the choice and adequacy of a method embodies a variety of assumptions regarding the nature of knowledge and the methods through which that knowledge can be obtained, as well as a set of root assumptions about the nature of the phenomena to be investigated' (Morgan and Smircich 1980: 491). The difficulty with such a view is that, if we accept that there is no perfect correspondence between research method and matters of epistemology and ontology, the notion that a method is inherently or necessarily indicative of certain wider assumptions about knowledge and the nature of social reality begins to founder.

In fact, research methods are much more 'free-floating' in terms of epistemology and ontology than is often supposed. This can be particularly demonstrated by reference to historical and other studies of social research. For example, Snizek (1976) examined 1,434 articles published in sociology journals between 1950 and 1970. He based his analysis on Ritzer's (1975) suggestion that sociology is underpinned by three **paradigms**, a term that will be briefly explored again in Chapter 27 (see Key concept 27.1). Two of the paradigms—the 'social factist' and the 'social definitionist' paradigms—correspond roughly to quantitative and qualitative research respectively. In his analysis, Snizek was unable to uncover an unambiguous pattern linking the grounding of an article

in either of these two paradigms with the research methods used. Similarly, Platt's (1986) historical research on American sociology has suggested that the connection that is often forged between functionalism, which itself is often associated with positivism, and the social survey is greatly exaggerated. Her research suggested that 'the two originated independently, and that leading functionalists had no special propensity to use surveys and leading surveyors no special propensity for functionalism' (Platt 1986: 527). Moreover, Platt's general conclusion from her research on the use of research methods in American sociology between 1920 and 1960 is very revealing:

research methods may on the level of theory, when theory is consciously involved at all, reflect intellectual *bricolage* or *post hoc* justifications rather than the consistent working through of carefully chosen fundamental assumptions. Frequently methodological choices are steered by quite other considerations, some of a highly practical nature, and there are independent methodological traditions with their own channels of transmission. . . . In many cases general theoretical/ methodological stances are just stances: slogans, hopes, aspirations, not guidelines with clear implications that are followed in practice. (Platt 1996: 275)

Platt's conclusion again suggests that the notion that research methods reflect or reveal certain assumptions about knowledge and social reality has to be questioned. When the use of research methods in practice is examined, while tendencies may be discernible that link them to certain assumptions, the connections are not absolute.

A further aspect of the way in which research methods are much more autonomous than is sometimes supposed can be seen in the fact that the methods associated with both quantitative and qualitative research are often employed together within a single piece of research. This issue is the focus of Chapter 27.



Problems with the quantitative/qualitative contrast

The contrasts between quantitative and qualitative research that were drawn in Chapter 17 suggest a somewhat hard-and-fast set of distinctions and differences (see in particular Table 17.1). However, there is a risk that this

kind of representation tends to exaggerate the differences between them. A few of the distinctions will be examined to demonstrate this point.

Behaviour versus meaning

The distinction is sometimes drawn between a focus on behaviour and a focus on meanings. However, quantitative research frequently involves the study of meanings in the form of attitude scales (such as the Likert scaling technique) and other techniques. Qualitative researchers may feel that the tendency for attitude scales to be pre-formulated and imposed on research participants means that they do not really gain access to meanings. The key point being made here is that at the very least quantitative researchers frequently *try* to address meanings. Also, somewhat ironically many of the techniques with which quantitative research is associated, most notably social survey research based on questionnaires and interviews,

have been shown to relate poorly to people's actual behaviour (see, for example, Thinking deeply 12.2). Moreover, looking at the other side of the divide, qualitative research frequently, if not invariably, entails the examination of behaviour in context. Qualitative researchers often want to interpret people's behaviour in terms of the norms, values, and culture of the group or community in question. In other words, quantitative and qualitative researchers are typically interested in both what people do and what they think, but go about the investigation of these areas in different ways. Therefore, the degree to which the behaviour versus meaning contrast coincides with quantitative and qualitative research should not be overstated. See Thinking deeply 26.1 for further consideration of this point.



Thinking deeply 26.1

Quantitative and qualitative research and the study of class identities

One of the problems with the quantitative/qualitative contrast is that sometimes there is a tendency to polarize or exaggerate their respective capacities. The 'behaviour versus meaning' issue is an illustration of that tendency. Another interesting example can be discerned in relation to the use of surveys to investigate class identities. Savage et al. (2001) conducted in-depth interviews with residents in the Manchester area to explore the nature of class identities at the end of the twentieth century. The interviews show that there is an ambivalence about class identities: people's sense of class identity is weak but class is nonetheless relevant to them. The authors depict class as a resource that is drawn upon to forge identity. In the abstract to the article, the authors make an interesting remark: 'sociologists should not assume that there is any necessary significance in how respondents define their class identity in surveys' (Savage et al. 2001: 875). Payne and Grew (2005) queried the notion that a qualitative research approach to the study of class identities is necessarily superior to that deriving from surveys. They point out that such a view often arises because of the greater spontaneity and hence apparent naturalness of qualitative interviewing. Payne and Grew (2005: 907) suggest that these features are often exaggerated by sociologists, who also 'over-estimate the degree of rapport and shared meaning with their respondents'. Further, Sturridge (2007: 211) has argued that quantitative research in the form of the survey can have an important role in the study of class identities, namely 'to look at who expresses a sense of class identity and how this sense of class identity relates to other identities. This is the major strength which large-scale surveys have in the field, they are able to provide a social mapping of who expresses a sense of class belonging.' Sturridge conducted a secondary analysis of data from the 2003 British Social Attitudes Survey to explore class identities. In line with her comments about the opportunities that surveys afford, she found that a sense of working-class identity continues to be salient for some social groups and that men are much more likely to express this awareness. She also found that for some groups a sense of belonging to the working class is construed in terms of class opposition and that this reflects workplace orientations and experiences.

These reflections and findings suggest that there is a tendency to overstate the differences between quantitative and qualitative research in terms of certain inherent capacities and that this may result in a neglect of certain issues and research questions. In this instance, the view that survey research has little to offer the study of class identities could result in its potential to address important issues on this topic not being exploited.

Theory and concepts tested in research versus theory and concepts emergent from data

A further related point is that the suggestion that theory and concepts are developed prior to undertaking a study in quantitative research is something of a caricature that is true only up to a point. It reflects a tendency to characterize quantitative research as driven by a theory-testing approach. However, while experimental investigations probably fit this model well, survey-based studies are often more exploratory than this view implies. Although concepts have to be measured, the nature of their interconnections is frequently not specified in advance. Quantitative research is far less driven by a hypothesis-testing strategy than is frequently supposed. As a result, the analysis of quantitative data from social surveys is often more exploratory than is generally appreciated and consequently offers opportunities for the generation of theories and concepts. As one American survey researcher has commented in relation to a large-scale survey he conducted in the 1950s, but which has much relevance today: 'There are so many questions which might be asked, so many correlations which can be run, so many ways in which the findings can be organized, and so few rules or precedents for making these choices that a thousand different studies could come out of the same data' (J. A. Davis 1964: 232).

The common depiction of quantitative research as solely an exercise in testing preformulated ideas fails to appreciate the degree to which findings frequently suggest new departures and theoretical contributions. Reflecting on his career in social survey research, Glock provides the following example based on his research on the correlates of variation in church involvement in an American sample:

It occurred to me and my collaborators that one or both of two things might be happening. The results might simply be a reflection of the fact that women, older persons, the familyless, and the less well-to-do have more time on their hands to become involved in the Church. Alternatively or in addition, it could be that these people become involved as a compensation for being deprived, relative to their counterparts, of access to the rewards of the larger society. The data, having suggested these explanations, did not afford a means to test them . . . Subsequently, I had the opportunity to test the theory with new data . . . (Glock 1988: 45–6)

Therefore, the suggestion that, unlike an interpretivist stance, quantitative research is solely concerned with the testing of ideas that have previously been formulated (such as hypotheses) fails to recognize the creative work that goes into the analysis of quantitative data and into the interpretation of findings. Equally, as noted above (see pages 615–16), qualitative research can be used in relation to the testing of theories.

Numbers versus words

Even perhaps this most basic element in the distinction between quantitative and qualitative research is not without problems. Qualitative researchers sometimes undertake a limited amount of quantification of their data. Silverman (1984, 1985) has argued that some quantification of findings from qualitative research can often help to uncover the generality of the phenomena being described. While observing doctor–patient interactions in National Health Service and private oncology clinics, Silverman quantified some of his data in order to bring out the differences between the two types of clinic. Through this exercise he was able to show that patients in private clinics were able to have a greater influence over what went on in the consultations. However, Silverman warns that such quantification should reflect research participants' own ways of understanding their social world.

In any case, it has often been noted that qualitative researchers engage in 'quasi-quantification' through the use of terms such as 'many', 'often', and 'some' (see below). All that is happening in cases of the kind described by Silverman is that the researcher is injecting greater precision into such estimates of frequency.

Artificial versus natural

The artificial/natural contrast referred to in Table 17.1 can similarly be criticized. It is often assumed that, because much quantitative research employs research instruments that are applied to the people being studied (questionnaires, structured interview schedules, structured observation schedules, and so on), it provides an artificial account of how the social world operates. Qualitative research is often viewed as more naturalistic (see Key concept 3.4 on naturalism). Ethnographic research in particular would seem to exhibit this quality, because the participant observer studies people in their normal social worlds and contexts—in other words, as they go about normal activities. However, when qualitative research is based on interviews (such as semi- and unstructured interviewing and focus groups), the

depiction 'natural' is possibly less applicable. Interviews still have to be arranged and interviewees have to be taken away from activities that they would otherwise be engaged in, even when the interviewing style is of the more conversational kind. We know very little about interviewees' reactions to and feelings about being interviewed. Phoenix (1994) reports on the responses of interviewees to in-depth interviews in connection with two studies—one concerned with mothers under the age of 20 and the other with the social identities of young people. While many of her interviewees apparently quite enjoyed being interviewed, it is equally clear that they were conscious of the fact that they had been engaged in interviews rather than conversations. This is revealed by the tendency in the replies quoted by Phoenix for some of the interviewees to disclose that they were aware that the experience was out of the ordinary. In the study of social identities, one black young woman is reported as saying that she liked the interview and added: 'I had the chance to explain how I feel about certain things and I don't really get the opportunity to do that much.' And another interviewee said it was a 'good interview' and added: 'I have never talked so much about myself for a long time, too busy talking about kids and their problems' (Phoenix 1994: 61). The interviews were clearly valuable in allowing to surface the perspectives of people whose voices are normally silent, but the point being made here is that the view that the methods associated with qualitative research are naturalistic is to exaggerate the contrast with the supposed artificiality of the research methods associated with quantitative research.

As noted in Chapter 21, focus group research is often described as more natural than qualitative interviewing

because it emulates the way people discuss issues in real life. Natural groupings are often used to emphasize this element. However, whether this is how group participants view the nature of their participation is unclear. In particular, when it is borne in mind that people are sometimes strangers, have to travel to a site where the session takes place, are paid for their trouble, and frequently discuss topics they rarely if ever talk about, it is not hard to take the view that the naturalism of focus groups is assumed rather than demonstrated.

In participant observation, the researcher can be a source of interference that renders the research situation less natural than it might superficially appear to be. Whenever the ethnographer is in an overt role, a certain amount of reactivity is possible—even inevitable. It is difficult to estimate the degree to which the ethnographer represents an intrusive element that has an impact on what is found, but once again the naturalism of such research is often assumed rather than demonstrated, although it is admittedly likely that it will be less artificial than the methods associated with quantitative research. However, when the ethnographer also engages in interviewing (as opposed to casual conversations), the naturalistic quality is likely to be less pronounced.

These observations suggest that there are areas and examples of studies that lead us to question the degree to which the quantitative/qualitative contrast is a rigid one. Once again, this is not to suggest that the contrast is unhelpful, but that we should be wary of assuming that in writing and talking about quantitative and qualitative research we are referring to two absolutely divergent and inconsistent research strategies.



The mutual analysis of quantitative and qualitative research

One further way in which the barriers between quantitative and qualitative research might be undermined is by virtue of developments in which each is used as an approach to analyse the other.

A qualitative research approach to quantitative research

There has been a growing interest in the examination of the writings of quantitative researchers using some of the methods associated with qualitative research. In part, this trend can be seen as an extension of the growth

of interest among qualitative researchers in the writing of ethnography, which can be seen in such work as Van Maanen (1988) and P. Atkinson (1990). The attention to quantitative research is very much part of this trend, because it reveals a concern in both cases with the notion that the written account of research not only constitutes the presentation of findings but is also an attempt to persuade the reader of the credibility of those findings. This is true of the natural sciences too; for example, in relation to the research by Gilbert and Mulkey (1984) discussed in Chapter 22, it was shown how the scientists employed an empiricist repertoire when writing up their

findings. This writing strategy was used to show how proper procedures were followed in a systematic and linear way. However, Gilbert and Mulkey demonstrated that, when the scientists discussed in interviews how they did their research, it is clear that the process was suffused with the influence of factors to do with their personal biographies.

One way in which a qualitative research approach to quantitative research is manifested is through what Gephart (1988: 9) has called 'ethnostatistics', by which is meant 'the study of the construction, interpretation, and display of statistics in quantitative social research'. Gephart shows that there are a number of ways in which the idea of ethnostatistics can be realized, but it is with just one of these—approaching statistics as rhetoric—that I will be concerned here. Directing attention to the idea of statistics as rhetoric means becoming sensitive to the ways in which statistical arguments are deployed to bestow credibility on research for target audiences. More specifically, this means examining the language used in persuading audiences about the validity of research. Indeed, the very use of statistics itself can be regarded as a rhetorical device because the use of quantification means that social research can bestow upon itself the appearance of a natural science and thereby achieve greater legitimacy and credibility by virtue of that association (McCartney 1970; John 1992).

A quantitative research approach to qualitative research

In Chapter 13, the research by Hodson (1996), which was based on the content analysis of workplace ethnographies, was given quite a lot of attention (see Research in focus 13.4). Essentially, Hodson's approach was to apply a quantitative research approach—in the form of content analysis—to qualitative research. This is a form of research that may have potential in other areas of social research in which ethnography has been a popular method, and as a result a good deal of ethnographic evidence has been built up. Hodson (1999) suggests that the study of social movements may be one such field; religious sects and cults may be yet another. Hodson's research is treated as a solution to the problem of making comparisons between ethnographic studies in a given area. One approach to synthesizing related qualitative studies is meta-ethnography (see Key concept 5.3), which is a qualitative research approach to such aggregation (Noblit and Hare 1988). However, whereas the practice of meta-ethnography is meant to be broadly in line with the goals of qualitative research, such as a

commitment to interpretivism and a sensitivity to the social context, Hodson's approach is one that largely ignores contextual factors in order to explore relationships between variables that have been abstracted out of the ethnographies.

Certain key issues need to be resolved when conducting analyses of the kind carried out by Hodson. One relates to the issue of conducting an exhaustive literature search for suitable studies for possible inclusion. Hodson chose to analyse just books, rather than articles, because of the limited amount of information that can usually be included in the latter. Even then, criteria for the inclusion of a book needed to be stipulated. Hodson (1999: 22) employed three: 'The criteria for inclusion were (a) the book had to be based on ethnographic methods of observation over a period of at least 6 months, (b) the observations had to be in a single organization, and (c) the book had to focus on at least one clearly identified group of workers . . .'. The application of these criteria resulted in the exclusion of 279 out of 365 books uncovered. A second crucial area relates to the coding of the studies, which was briefly covered in Research in focus 13.4. Hodson stresses the importance of having considerable knowledge of the subject area, adopting clear coding rules, and pilot testing the coding schedule. In addition, he recommends checking the reliability of coding by having 10 per cent of the documents coded by two people. The process of coding was time-consuming, in that Hodson calculates that each book-length ethnography took forty or more hours to code.

This approach has many attractions, not the least of which is the impossibility of a quantitative researcher being able to conduct investigations in such a varied set of organizations. Also, it means that more data of much greater depth can be used than can typically be gathered by quantitative researchers. It also allows hypotheses deriving from established theories to be tested, such as the 'technological implications' approach, which sees technologies as having impacts on the experience of work (Hodson 1996). However, the loss of a sense of social context is likely to be unattractive to many qualitative researchers.

Of particular significance for this discussion is the remark that 'the fundamental contribution of the systematic analysis of documentary accounts is that it creates an analytic link between the in-depth accounts of professional observers and the statistical methods of quantitative researchers' (Hodson 1999: 68). In other words, the application of quantitative methods to qualitative research may provide a meeting ground for the two research strategies.



Quantification in qualitative research

As noted in Chapter 17, the numbers versus words contrast is perhaps the most basic in many people's minds when they think about the differences between quantitative and qualitative research. After all, it seems to relate in a most fundamental way to the very terms used to denote the two approaches, which seem to imply the presence and absence of numbers. However, it is simply not the case that there is a complete absence of quantification in qualitative research. As we will see in the next chapter, when qualitative researchers incorporate research methods associated with quantitative research into their investigations, a certain amount of quantification is injected into the research.

Quite aside from the issue of combining quantitative and qualitative research, three observations are worth making about quantification in the analysis and writing-up of qualitative data.

Thematic analysis

In Chapter 24 it was observed that one of the commonest approaches to qualitative data analysis is undertaking a search for themes in transcripts or field notes. However, as Bryman and Burgess (1994b: 224) point out, the criteria employed in the identification of themes are often unclear. One possible factor that these authors suggest may be in operation is the frequency of the occurrence of certain incidents, words, phrases, and so on that denote a theme. In other words, a theme is more likely to be identified the more times the phenomenon it denotes occurs in the course of coding. This process may also account for the prominence given to some themes over others when writing up the fruits of qualitative data analysis. In other words, a kind of implicit quantification may be in operation that influences the identification of themes and the elevation of some themes over others. In fact, Ryan and Bernard (2003), as noted in Chapter 24, recommend the search for 'repetitions' as one of the ways in which themes may be identified.

Quasi-quantification in qualitative research

It has often been noted that qualitative researchers engage in 'quasi-quantification' through the use of terms such as 'many', 'frequently', 'rarely', 'often', and 'some'.

In order to be able to make such allusions to quantity, the qualitative researcher should have some idea of the relative frequency of the phenomena being referred to. However, as expressions of quantities, they are imprecise, and it is often difficult to discern why they are being used at all. The alternative would seem to be to engage in a limited amount of quantification when it is appropriate, such as when an expression of quantity can bolster an argument. This point leads directly on to the next section.

Combating anecdotalism through limited quantification

One of the criticisms that is levelled against qualitative research is that the publications on which it is based are often anecdotal, giving the reader little guidance as to the prevalence of the issue to which the anecdote refers. The widespread use of brief sequences of conversation, snippets from interview transcripts, and accounts of encounters between people provides little sense of the prevalence of whatever such items of evidence are supposed to indicate. There is the related risk that a particularly striking statement by someone or an unexpected activity may have more significance attached to it than might be warranted in terms of its frequency.

Perhaps at least partly in response to these problems, qualitative researchers sometimes undertake a limited amount of quantification of their data. We can see this feature in Silverman's (1984, 1985) research on oncology clinics, which was referred to above. Gabriel (1998) describes how he studied organizational culture in a variety of organizations by collecting during interviews stories about the organizations in question. Computers and information technology were a particular focus of the stories elicited. Altogether 377 stories were collected in the course of 126 interviews in 5 organizations. Gabriel shows that the stories were of different types, such as: comic stories (which were usually a mechanism for disparagement of others); epic stories (survival against the odds); tragic stories (undeserved misfortune); gripes (personal injustices); and so on. He counted the number of each type: comic stories were the most numerous at 108; then epic stories (82); tragic stories (53); gripe stories (40); and so on. Themes in the stories were also counted, such as whether they involved a leader, a

personal trauma, an accident, and so forth. In all these cases, the types of stories and the themes could have been treated in an anecdotal way, but the use of such simple counting conveys a clear sense of their relative prevalence.

Exercises like these can be used to counter the suggestion that is sometimes made that the approach to presenting qualitative data can be too anecdotal, so that readers are given too little sense of the *extent* to which certain beliefs are held or a certain form of behaviour occurs. All that is happening in such cases is that the researcher is injecting greater precision into estimates of frequency than can be derived from quasi-quantification terms. Moreover, it is not inconceivable that there might be greater use of limited amounts of quantification in qualitative research in the future as a result of the growing incursion of computers into qualitative data analysis

(CAQDAS). Most of the major software programs include a facility that allows the analyst to produce simple counts of such things as the frequency with which a word or a coded theme occurs. In many cases, they can also produce simple cross-tabulations—for example, relating the occurrence of a coded theme to gender. Writing when CAQDAS was used far less than it is today, Ragin and Becker (1989: 54) concluded their review of the impact of microcomputers on sociologists' 'analytic habits' with the following remark: 'Thus, the microcomputer provides important technical means for new kinds of dialogues between ideas and evidence and, at the same time, provides a common technical ground for the meeting of qualitative and quantitative researchers.' The greater use of quantification by qualitative researchers may turn out to be one of the more significant areas for this 'meeting'.



Key points

- There are differences between quantitative and qualitative research but it is important not to exaggerate them.
- The connections between epistemology and ontology, on the one hand, and research methods, on the other, are not deterministic.
- Qualitative research sometimes exhibits features normally associated with a natural science model.
- Quantitative research aims on occasions to engage with an interpretivist stance.
- Research methods are more autonomous in relation to epistemological commitments than is often appreciated.
- The artificial/natural contrast that is often an element in drawing a distinction between quantitative and qualitative research is frequently exaggerated.
- A quantitative research approach can be employed for the analysis of qualitative studies and a qualitative research approach can be employed to examine the rhetoric of quantitative researchers.
- Some qualitative researchers employ quantification in their work.



Questions for review

- What is the nature of the link between research methods and epistemology?

The natural science model and qualitative research

- Are the natural sciences positivistic?
- To what extent can some qualitative research be deemed to exhibit the characteristics of a natural science model?

Quantitative research and interpretivism

- To what extent can some quantitative research be deemed to exhibit the characteristics of interpretivism?

Quantitative research and constructionism

- To what extent can some quantitative research be deemed to exhibit the characteristics of constructionism?

Research methods and epistemological and ontological considerations

- How far do research methods necessarily carry epistemological and ontological implications?

Problems with the quantitative/qualitative contrast

- Outline some of the ways in which the quantitative/qualitative contrast may not be as hard and fast as is often supposed.

The mutual analysis of quantitative and qualitative research

- What might some of the implications of Gilbert and Mulkay's (1984) concepts of interpretative repertoires be for the qualitative analysis of quantitative research?
- Assess the significance of ethnostatistics.
- Assess the significance of Hodson's research.

Quantification in qualitative research

- How far is quantification a feature of qualitative research?

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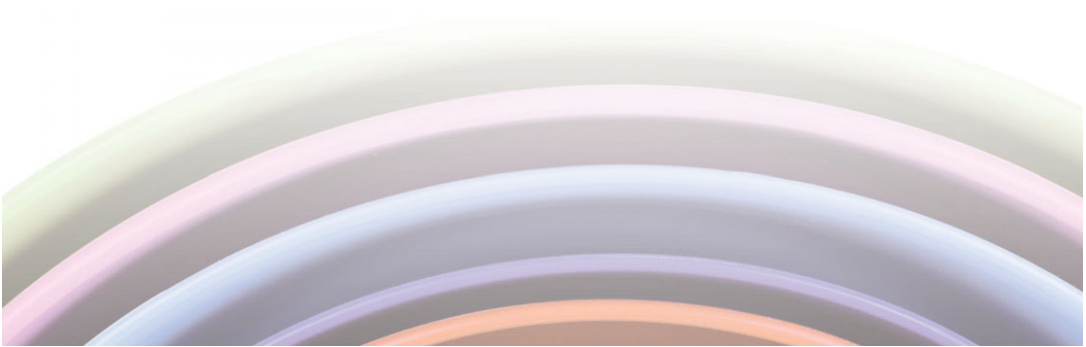
Visit the Online Resource Centre that accompanies this book to enrich your understanding of breaking down the quantitative/qualitative divide. Consult web links, test yourself using multiple choice questions, and gain further guidance and inspiration from the Student Researcher's Toolkit.

27

Mixed methods research: combining quantitative and qualitative research

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Chapter guide

This chapter is concerned with mixed methods research—that is, research that combines quantitative and qualitative research. While this may seem a straightforward way of resolving and breaking down the divide between the two research strategies, it is not without controversy. Moreover, there may be practical difficulties associated with mixed methods research. This chapter explores:

- arguments against the combination of quantitative and qualitative research; two kinds of argument are distinguished and are referred to as the embedded methods and paradigm arguments;
- the suggestion that there are two versions of the debate about the possibility of combining quantitative and qualitative research: one that concentrates on methods of research and another that is concerned with epistemological issues;
- the different ways in which mixed methods research has been carried out;
- the need to recognize that mixed methods research is not inherently superior to research that employs a single research strategy.

Introduction

So far throughout the book an emphasis has been placed upon the strengths and weaknesses of the research methods associated with quantitative and qualitative research. One possible response to this kind of recognition is to propose combining them. After all, such a strategy would seem to allow the various strengths to be capitalized upon and the weaknesses offset somewhat. However, not all writers on research methods agree that such integration is either desirable or feasible. On the other hand, it is probably the case that the amount of combined research has been increasing since the early 1980s. Therefore, in discussing the combination of quantitative and qualitative research, this chapter will be concerned with three main issues:

1. an examination of the arguments against integrating quantitative and qualitative research;
2. the different ways in which quantitative and qualitative research have been combined;
3. an assessment of combined research, which asks whether it is necessarily superior to investigations relying on just one research strategy and whether there are any additional problems deriving from it.

The term **mixed methods research** is used as a simple shorthand to stand for research that integrates quantita-

tive and qualitative research within a single project. Of course, there is research that, for example, combines structured interviewing with structured observation or ethnography with semi-structured interviewing. However, these instances of the combination of research methods are associated with just one research strategy. By mixed methods research I am referring to research that combines research methods that cross the two research strategies. In the earlier editions of this book, I used the term ‘multi-strategy research’ to describe investigations combining quantitative and qualitative research. However, ‘mixed methods research’ has increasingly become the preferred term and in many ways better expresses the fact that, in many cases, using both quantitative and qualitative research should involve a mixing of the research methods involved and not just using them in tandem. In other words, the quantitative and the qualitative data deriving from mixed methods research should be mutually illuminating. Indeed, mixed methods research has become something of a growth industry since the first edition of this book. Since *Social Research Methods* was first published in 2001, mixed methods research has become an increasingly used and accepted approach to conducting social research. It has been the focus of a specialist handbook that has gone into a second edition (Tashakkori and Teddlie

2003, 2010) and specialist journals, such as the *Journal of Mixed Methods Research*, have begun publication. When I examined articles based on mixed methods research in the period 1994–2003, I found a threefold increase over that period (Bryman 2008a). Just after I finished writing the second edition of this book,

I conducted research specifically to do with the nature of mixed methods research (Bryman 2006a, 2006b). I have organized the section on ‘Approaches to mixed methods research’ below around some of my findings from that research project.



The argument against mixed methods research

The argument against mixed methods research tends to be based on either and sometimes both of two kinds of argument:

1. the idea that research methods carry epistemological commitments, and
2. the idea that quantitative and qualitative research are separate paradigms.

These two arguments will now be briefly reviewed.

The embedded methods argument

This first position, which was outlined in Chapter 26, implies that research methods are ineluctably rooted in epistemological and ontological commitments. Such a view of research methods can be discerned in statements like the following:

every research tool or procedure is inextricably embedded in commitments to particular versions of the world and to knowing that world. To use a questionnaire, to use an attitude scale, to take the role of participant observer, to select a random sample, to measure rates of population growth, and so on, is to be involved in conceptions of the world which allow these instruments to be used for the purposes conceived. (J. A. Hughes 1990: 11)

According to such a position, the decision to employ, for example, participant observation is not simply about how to go about data collection but a commitment to an epistemological position that is inimical to positivism and that is consistent with interpretivism.

This kind of view of research methods has led some writers to argue that mixed methods research is not feasible or even desirable. An ethnographer may collect

questionnaire data to gain information about a slice of social life that is not amenable to participant observation, but this does not represent an integration of quantitative and qualitative research, because the epistemological positions in which the two methods are grounded constitute irreconcilable views about how social reality should be studied. J. K. Smith (1983: 12, 13), for example, argues that each of the two research strategies ‘sponsors different procedures and has different epistemological implications’ and therefore counsels researchers not to ‘accept the unfounded assumption that the methods are complementary’. Smith and Heshusius (1986: 8) criticize the integration of research strategies, because it ignores the assumptions underlying research methods and transforms ‘qualitative inquiry into a procedural variation of quantitative inquiry’.

The chief difficulty with the argument that writers like Smith present is that, as was noted in Chapter 26, the idea that research methods carry with them fixed epistemological and ontological implications is very difficult to sustain. They are capable of being put to a wide variety of tasks.

The paradigm argument

The paradigm argument is closely related to the previous one. It conceives of quantitative and qualitative research as **paradigms** (see Key concept 27.1) in which epistemological assumptions, values, and methods are inextricably intertwined and are incompatible between paradigms (e.g. Guba 1985; Morgan 1998b). Therefore, when researchers combine participant observation with a questionnaire, they are not really combining quantitative and qualitative research, since paradigms are incommensurable—that is, they are incompatible: the integration is only at a superficial level and within a single paradigm.



Key concept 27.1

What is a paradigm?

Kuhn's (1970) highly influential use of the term 'paradigm' derives from his analysis of revolutions in science. A paradigm is 'a cluster of beliefs and dictates which for scientists in a particular discipline influence what should be studied, how research should be done, [and] how results should be interpreted' (Bryman 1988a: 4). Kuhn depicted the natural sciences as going through periods of revolution, whereby normal science (science carried out in terms of the prevailing paradigm) is increasingly challenged by anomalies that are inconsistent with the assumptions and established findings in the discipline at that time. The growth in anomalies eventually gives way to a crisis in the discipline, which in turn occasions a revolution. The period of revolution is resolved when a new paradigm emerges as the ascendant one and a new period of normal science sets in. An important feature of paradigms is that they are *incommensurable*—that is, they are inconsistent with each other because of their divergent assumptions and methods. Disciplines in which no paradigm has emerged as pre-eminent, such as the social sciences, are deemed pre-paradigmatic, in that they feature competing paradigms. One of the problems with the term is that it is not very specific: Masterman (1970) was able to discern twenty-one different uses of it by Kuhn. Nonetheless, its use is widespread in the social sciences (e.g. Ritzer 1975; Guba 1985).

The problem with the paradigm argument is that it rests, as with the embedded methods one, on contentions about the interconnectedness of method and epistemology in particular that cannot—in the case of social research—be demonstrated. Moreover, while Kuhn (1970)

certainly argued that paradigms are incommensurable, it is by no means clear that quantitative and qualitative research are in fact paradigms. As suggested in Chapter 26, there are areas of overlap and commonality between them.



Thinking deeply 27.1

Stages in the development of mixed methods research

Creswell and Plano Clark (2011) have suggested that mixed methods research has proceeded through five stages.

1. A *formative period* during which various writers took tentative steps towards and lay the foundations for mixed methods approaches. This stage corresponds roughly to a period spanning the 1950s through to the early 1980s.
2. A *paradigm debate period* during the 1970s and 1980s that responded to qualitative researchers' insistence that their style of investigation was based on different epistemological and ontological foundations from quantitative research. Because of this insistence, quantitative and qualitative research were viewed as not capable of integration. During this period, a number of writers challenged this view, arguing that mixed methods investigations were feasible and potentially could lead to superior findings. I am placed in this period, because in Bryman (1988a) I 'reviewed the debate and established connections between the two traditions' (Creswell and Plano Clark 2011: 23).
3. A *procedural development period* beginning in the late 1980s and progressing into the twenty-first century that is concerned with how mixed methods studies could be designed. Morgan (1998b), whose work is referred to in Thinking deeply 27.2, belongs to this period. I am also in this period, because in Bryman (1988a) I 'addressed the reasons for combining quantitative and qualitative research' (Creswell and Plano Clark 2011: 23).
4. An *advocacy and expansion* period that began in the present century and is concerned with the recognition of and development of mixed methods research as a distinctive approach, even as a movement. The arrival of a separate handbook for mixed methods researchers (Tashakkori and Teddlie 2003, 2010) and of the *Journal of Mixed Methods Research* are indicative of this development.
5. A *reflective* period that began around 2005 in which many authors assessed the state of mixed methods research, glimpsed into its future, and in some cases launched critiques of its state and direction.



Two versions of the debate about quantitative and qualitative research

There would seem to be two different versions about the nature of quantitative and qualitative research, and these two different versions have implications in writers' minds about whether the two can be combined.

- An *epistemological version*, as in the embedded methods argument and the paradigm argument, sees quantitative and qualitative research as grounded in incompatible epistemological principles (and ontological ones too, but these tend not to be given as much attention). According to this version of their nature, mixed methods research is not possible.
- A *technical version*, which is the position taken by most researchers whose work is mentioned in the next section, gives greater prominence to the strengths of the data-collection and data-analysis techniques with which quantitative and qualitative research are each associated and sees these as capable of being fused. There is a recognition that quantitative and qualitative

research are each connected with distinctive epistemological and ontological assumptions, but the connections are not viewed as fixed and ineluctable. Research methods are perceived, unlike in the epistemological version, as autonomous. A research method from one research strategy is viewed as capable of being pressed into the service of another. Indeed, in some instances, as will be seen in the next section, the notion that there is a 'leading' research strategy in a mixed methods investigation may not even apply in some cases.

The technical version about the nature of quantitative and qualitative research essentially views the two research strategies as compatible. As a result, mixed methods research becomes both feasible and desirable. It is in that spirit that we now turn to a discussion of the ways in which quantitative and qualitative research can be combined.



Approaches to mixed methods research

This section will be structured in terms of a classification I derived from conducting a content analysis of empirical articles in refereed journals in the social sciences (Bryman 2006a, 2006b; see Research in focus 27.1 for a brief description of this research). The classification has

been changed slightly from the one presented in my earlier publications. Several other ways of classifying mixed methods investigations have been proposed by other authors, and one of the most prominent is presented in Thinking deeply 27.2.



Thinking deeply 27.2 A classification of approaches to mixed methods research

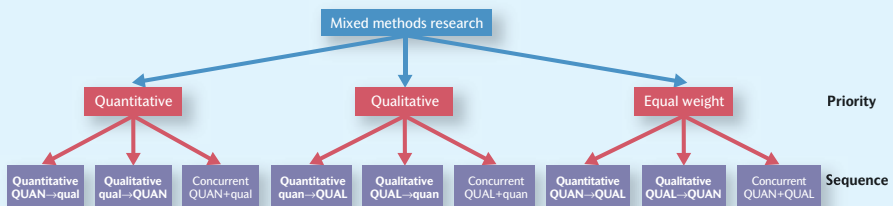
As interest in mixed methods research has grown, various ways of classifying it have arisen. One approach, which is the one taken in the bulk of this chapter, is in terms of the purposes of mixed methods studies and the roles that the quantitative and qualitative components play in such studies (see also Bryman 2006a, 2008b). However, a further approach has been to classify mixed methods studies in terms of two criteria (e.g. Morgan 1998b):

- *The priority decision.* How far is a qualitative or a quantitative method the principal data-gathering tool or do they have equal weight?
- *The sequence decision.* Which method precedes which? In other words, does the qualitative method precede the quantitative one or vice versa or is the data collection associated with each method concurrent?

These criteria yield nine possible types (see Figure 27.1). In this classification, upper case indicates priority—for example, QUAL indicates that the qualitative component was the main data-collection approach; lower case indicates a more subsidiary role—for example, qual. Arrows refer to the sequence—for example, QUAN→qual means that the collection of quantitative data was the main data-collection approach and that the collection of these quantitative data was undertaken before the qualitative data, which occupy a subsidiary role. The + simply means that the collection of the quantitative and the qualitative data was conducted more or less concurrently. One difficulty with this and related classifications that embellish it is that it is not always easy to establish issues of priority and sequence when reading the report of a study. However, it is useful as a way of thinking about fundamental aspects of the design of mixed methods studies.

Figure 27.1

Classifying mixed methods research in terms of priority and sequence



Note: Capitals and lower case indicate priority; arrows indicate sequence; + indicates concurrent.



Research in focus 27.1

Mixed methods research on mixed methods research

In 2003–4 I worked on a fellowship funded by the Economic and Social Research Council that focused on mixed methods research. There were two main components: a content analysis on articles reporting the findings of mixed methods research and interviews with mixed methods researchers. With the first component I was interested in the ways that quantitative and qualitative research are combined in published journal articles (Bryman 2006a). With the second component, I conducted semi-structured interviews with twenty mixed methods researchers because I was keen to glean an inside view of the research process. The findings from the two components of this project will be used for discussing mixed methods research in the rest of this chapter.

A content analysis of articles based on mixed methods research

One component of the research on mixed methods research described in Research in focus 27.1 was a content analysis of journal articles reporting the findings of mixed methods research. Journal articles do not encapsulate all possible contexts in which projects reporting mixed methods research might be found. Conference papers and books are other possible sites. However, journal articles are a major form of reporting findings and have the advantage that, in most cases, the peer review process provides a quality control mechanism. By contrast, conference papers and books are sometimes not peer reviewed. The approach to gleaming a sample was to search the Social Sciences Citation Index (SSCI) for articles in which relevant keywords or phrases such as 'quantitative' and 'qualitative', or 'multi(-)method', or 'mixed method', or 'triangulation' appeared in the title, keywords, or abstract. This means that the sample comprises articles that to some degree foreground the fact that the study is based on both quantitative and qualitative

research. During the search, the emphasis was on uncovering articles in five fields: sociology; social psychology; human, social and cultural geography; management and organizational behaviour; and media and cultural studies. The analysis was restricted to a ten-year period of 1994–2003. Judgements about whether articles fell within the purview of the investigation, in terms of whether they could be regarded as deriving from the five fields, were made on the basis of the journal title or information supplied in abstracts. In this way, a total of 232 articles was generated and content analysed.

A major focus of the content analysis was on the rationales proffered for combining quantitative and qualitative research. A coding scheme was developed for classifying the rationales given by authors of articles. This coding scheme was based on an extensive review of the kinds of reasons that are frequently given in both methodological writings and research articles for combining quantitative and qualitative research. The scheme provided for the rationales is outlined in Thinking deeply 27.3. These can be thought of as ways of combining quantitative and qualitative research.



Thinking deeply 27.3

Ways of combining quantitative and qualitative research

Drawing on a content analysis of articles deriving from mixed methods research, Bryman (2006a) identified the following ways in which quantitative and qualitative research are combined.

1. *Triangulation* or greater validity—refers to the traditional view that quantitative and qualitative research might be combined to triangulate findings in order that they may be mutually corroborated. If the term was used as a synonym for integrating quantitative and qualitative research, it was not coded as triangulation.
2. *Offset*—refers to the suggestion that the research methods associated with both quantitative and qualitative research have their own strengths and weaknesses so that combining them allows the researcher to offset their weaknesses to draw on the strengths of both.
3. *Completeness*—refers to the notion that the researcher can bring together a more comprehensive account of the area of enquiry in which he or she is interested if both quantitative and qualitative research are employed.
4. *Process*—quantitative research provides an account of structures in social life but qualitative research provides a sense of process.
5. *Different research questions*—this is the argument that quantitative and qualitative research can each answer different research questions, but this item was coded only if authors explicitly stated that they were doing this.
6. *Explanation*—one of the two research methods is used to help explain findings generated by the other.
7. *Unexpected results*—refers to the suggestion that quantitative and qualitative research can be fruitfully combined when one generates surprising results that can be understood by employing the other.

8. *Instrument development*—refers to contexts in which qualitative research is employed to develop questionnaire and scale items, for example, so that better wording or more comprehensive closed answers can be generated.
9. *Sampling*—refers to situations in which one approach is used to facilitate the sampling of respondents or cases.
10. *Credibility*—refers to suggestions that employing both approaches enhances the integrity of findings.
11. *Context*—refers to cases in which the combination is rationalized in terms of qualitative research providing contextual understanding coupled with either generalizable, externally valid findings or broad relationships among variables uncovered through a survey.
12. *Illustration*—refers to the use of qualitative data to illustrate quantitative findings, often referred to as putting 'meat on the bones' of 'dry' quantitative findings.
13. *Utility* or improving the usefulness of findings—refers to a suggestion, which is more likely to be prominent among articles with an applied focus, that combining the two approaches will be more useful to practitioners and others.
14. *Confirm and discover*—this entails using qualitative data to generate hypotheses and using quantitative research to test them within a single project.
15. *Diversity of views*—this includes two slightly different rationales—namely, combining researchers' and participants' perspectives through quantitative and qualitative research respectively and uncovering relationships between variables through quantitative research while also revealing meanings among research participants through qualitative research.
16. *Enhancement* or building upon quantitative/qualitative findings—this entails a reference to making more of or augmenting either quantitative or qualitative findings by gathering data using a qualitative or quantitative research approach.
17. *Other/unclear*.
18. *Not stated*.

When coding each article, a distinction was made between *rationale* and *practice*. First, the rationale given by authors for combining the two approaches to data collection and/or analysis was coded. For this exercise, the reasons that had been given before the findings were presented were typically examined and coded. Then, the ways in which quantitative and qualitative research were actually combined were coded. In doing so, the coding reflected authors' reflections on what they felt had been gleaned from combining quantitative and qualitative research and any ways in which the two were combined that were not reflected in authors' accounts. This is what is meant by *practice*. The purpose of discriminating between these two ways of thinking about the justification for mixed methods research was that authors' accounts of why they intended to combine quantitative and qualitative research might differ from how they actually combined them in practice.

Table 27.1 provides the number of articles classified in terms of each category of rationale and practice and their

respective percentages of all 232 articles. The percentages add up to over 100 per cent in the case of both rationale and practice because any article could be coded in terms of two or more categories. Interestingly, the number and percentage of articles within each category are usually higher for practice than for rationale. This occurs for two reasons. One is that the number of articles where the rationale is not stated falls from just over one-quarter to nearly zero. Second, researchers seem to find more uses for mixed methods research than they envisaged at the outset.

The bulk of the rest of this chapter will present some examples of each of these rationales for conducting mixed methods research. Some of the examples are ones that were in the sample on which the content analysis was based but others are not. In the latter category, I have included books, which were not included in the sample. Each of the rationales may be thought of as an approach to conducting mixed methods research.

Table 27.1

Mixed methods research in practice

Category	Rationale	Practice
	Number of articles (% of all 232 cases)	
Triangulation	29 (12.5)	80 (34.5)
Offset	7 (3)	4 (1.7)
Completeness	31 (13)	67 (28.9)
Process	5 (2.2)	6 (2.6)
Different research questions	13 (5.6)	10 (4.3)
Explanation	13 (5.6)	32 (13.8)
Unexpected results	0	2 (0.9)
Instrument development	18 (7.8)	21 (9.1)
Sampling	31 (13.4)	43 (18.5)
Credibility	2 (0.9)	5 (2.2)
Context	8 (3.4)	10 (4.3)
Illustration	4 (1.7)	53 (22.8)
Utility	2 (0.9)	2 (0.9)
Confirm and discover	9 (3.9)	15 (6.5)
Diversity of views	26 (11.2)	35 (15.1)
Enhancement	73 (31.5)	121 (52.2)
Other/unclear	8 (3.4)	14 (6.1)
Not stated	62 (26.7)	1 (0.4)

Source: Based on Bryman (2006a).

Approaches to combining quantitative and qualitative research in mixed methods research

This section of the chapter provides illustrations of each of the ways of combining quantitative and qualitative research in mixed methods research using the classification presented in Thinking deeply 27.3 (see also Table 27.1). Each of the rationales outlined in the previous section can be thought of as an approach to mixed methods research. This applies rather less obviously to two of the rationales—credibility and utility—but these have been included for the sake of completeness.

Triangulation

The idea of triangulation has been previously encountered in Key concept 17.4. When applied to the present context, it implies that the results of an investigation employing a method associated with one research strategy are cross-checked against the results of using a method associated with the other research strategy. It is an adaptation of

the argument by writers like Webb et al. (1966) that confidence in the findings deriving from a study using a quantitative research strategy can be enhanced by using more than one way of measuring a concept.

An illustration of a study using a triangulation approach as well as other rationales for doing mixed methods research is the CCSE study referred to in Research in focus 2.9. Silva and Wright (2008: 3) write that the qualitative interviews were conducted to ‘check and correct the quantitative data’ and make the survey data more robust. In the Cultural Capital and Social Exclusion study, the researchers took the relatively unusual step of asking each sampled interviewee about many of the answers they had given in the questionnaire in order to see whether the two kinds of answer corresponded. More often, researchers conducting a triangulation exercise compare the quantitative and qualitative findings in aggregate. For example, Bickerstaff et al. (2008) conducted research into people’s perceptions of climate change and radioactive waste against a backdrop of a great deal of debate at the UK policy level concerning energy, which to a significant extent has the potential to frame perceptions. The researchers drew on two sources of data: a national interview survey based on a quota sample of 1,547 adults, and one focus group discussion in each of four towns (Cromer, Norwich, Heysham, and Liverpool) with each group meeting twice. The authors suggest that the two sets of findings were consistent when they write that the focus group discussions ‘revealed a profoundly negative set of responses to the idea of radioactive waste and in this way support the findings of the national survey’ (Bickerstaff et al. 2008: 153).

A triangulation exercise may occur as a result of a planned or unplanned strategy. In other words, at the outset, a researcher may plan to conduct mixed methods research in order to establish whether the quantitative and qualitative findings corroborate each other; alternatively, possibility of comparing the quantitative and the qualitative findings may arise once the data have been collected. Thus, in the study of the foot and mouth disease outbreak covered in Research in focus 2.8 and 27.3, the researchers did not obviously build in a triangulation strategy into their plans but note at one point that ‘both in the questionnaire survey and the focus groups people expressed high concern about FMD and its possible consequences’ (Poortinga et al. 2004: 86). At another point the authors write: ‘The perceived causes of the FMD outbreak in the focus groups overlapped largely the three factors that were identified in the questionnaire survey’ (Poortinga et al. 2004: 87). It is striking that the authors use the word ‘largely’ here, suggesting that there was

not a perfect correspondence. This occurred because the three perceived causes—farming practices, regulation, and market forces—were also found in the focus group data, but the factors were discussed by group members in combination. As such, there is an element of what is described in Thinking deeply 27.3 of ‘enhancement’. This is not uncommon when a triangulation approach to mixed methods research is employed: the two sets of data correspond to each other but not perfectly, thus requiring a certain degree of qualification.

When looking at these examples, it is clear that the findings were broadly consistent. However, when a triangulation exercise is undertaken, the possibility of a failure to corroborate findings always exists. This raises the issue of what approach should be taken to inconsistent results.

In the course of their research into media reporting of social science research (Research in focus 27.2), Deacon et al. (1998) found that their data revealed an inconsistency between some of the quantitative and qualitative data: the former (methods 2 and 3) suggested that journalists and social scientists enjoyed broadly consensual

relationships with regard to the reporting of social science research in the media, but the qualitative findings (methods 4 and 5) suggested greater collision of approaches and values. Rather than opt for one set of findings as providing the more accurate view, the data were re-examined. For example, Deacon et al. show that a major component of the apparent discrepancy has to do with the tendency for social scientists who are answering survey questions about coverage of their own research (method 3) to reply in terms of a feeling of relief that it was not as bad as expected. However, in interviews (method 4), social scientists tend to make much more of what Deacon et al. call ‘war stories’—that is, memorable and often highly wounding encounters with the media. Such encounters were not being depicted in the interviews as typical, but their general feelings about media coverage of social science research appeared to have been highly influenced by their bruising encounters. Thus, in general, the questionnaires revealed that social scientists were relatively pleased with the reporting of their research, but, when they were encouraged to reflect on specific problems in the past, the drift of their replies became more negative.



Research in focus 27.2

Research methods used in a study of the reporting of social science research in the mass media

In their research on the reporting of social science research in the British mass media, Fenton et al. (1998; see also Deacon et al. 1998) employed several quantitative and qualitative methods:

1. content analysis of news and current affairs coverage (local and national newspapers, TV, and radio) (592 items); see Research in focus 13.1 for more on this aspect of the research;
2. mail questionnaire survey of social scientists' views about media coverage and their own practices (674 respondents);
3. mail questionnaire survey of social scientists who had received media coverage as identified in the content analysis (123 respondents);
4. semi-structured interviews with social scientists who had received coverage as identified in the content analysis (20 interviews);
5. semi-structured interviews with journalists identified in the content analysis (34 interviews);
6. semi-structured interviews with representatives of funding bodies and government (27 interviews);
7. tracking of journalists at conferences (3 conferences);
8. focus group analysis of audience reception of media items (13 focus groups); see Chapter 21 for more on this aspect of the research.

Offset

Offset was rarely encountered. It implies that the weaknesses of a quantitative or a qualitative method can be offset by including a qualitative or a quantitative method that has its own strengths. In the preamble to her account of mixed methods research on the benefits of adult learning, Hammond (2005: 240) has suggested that 'each approach has its own limitations or "imperfections", which can be compensated for by using an alternative method'. Similarly, the authors of the study referred to in Research in focus 27.7 write that the combination of methods helped 'to reduce the biases associated with each method and therefore improve our understanding of the cultural forces involved in child development' (Harkness et al. 2006: 78). One of the mixed methods research practitioners that I interviewed (see Research in focus 27.1) was explicit on this point:

it seems to me that the only way you can begin to get close to the kind of methods that are reliable in natural scientific or engineering work is to use every tool you've got. You know, our tools are so inadequate and the material to which we're applying them is so slippery that you've got to use everything you have.

Completeness

Completeness indicates that a more complete answer to a research question or set of research questions can be achieved by including both quantitative and qualitative methods. It implies that the gaps left by one method (for example, a quantitative one) can be filled by another (for example, a qualitative one). One of its most common forms is when ethnographers employ structured interviewing or possibly a self-completion questionnaire, because not everything they need to know about is accessible through participant observation. This kind of need can arise for several reasons, such as the need for information that is not accessible to observation or to qualitative interviewing (for example, systematic information about social backgrounds of people in a particular setting), or the difficulty of gaining access to certain groups of people. For her research on the processes whereby people became Moonies (members of the Unification Church) in Britain, Barker (1984) relied mainly on participant observation and in-depth interviewing.

However, she also conducted a number of questionnaire surveys of members. Sometimes, this was done to test hypotheses she had begun to formulate (see below on this use of mixed methods research), but often it was undertaken in order to acquire information on social class backgrounds and religious experiences prior to becoming a Moonie. Such information was not accessible through participant observation.

Lockyer (2006) employed a mixed methods approach for her study of humour. She was interested in the controversies that can arise in relation to humour. There were various components to her mixed methods examination of humour, including: a quantitative content analysis of readers' letters of complaint in *Private Eye* about offence caused to them concerning humour in the magazine; an examination of the discursive practices used in the magazine for managing complaints; a detailed linguistic analysis of some of the letters; libel cases brought against the magazine; and semi-structured interviews with *Private Eye* journalists. Lockyer argues that the chief benefit of using a mixed methods approach is that an extremely comprehensive portrait of humour in this magazine (and the controversies surrounding that humour) is forthcoming. Thus, the content analysis provided a necessary overview of the issue, such as the topics that are particularly likely to produce complaints, while the examination of discursive strategies for managing complaints identified some of the rhetorical strategies used to do this (such as suggesting that the reader lacks a sense of humour). The intensive linguistic examination of some letters, which were selected from those that had been content analysed, showed the ways in which the criticism of humour is initiated. Lockyer shows, for example, that readers rarely baldly state that they have been caused offence and that they often provide a preamble to their letters that establishes that they greatly value *Private Eye* and thereby help to head off objections to their letters. Lockyer argues that humour is a complex social phenomenon, largely because of the ambiguities and controversies with which it is often, if not invariably, imbued. She suggests that complex objects of social scientific analysis like this require a variety of research tools to arrive at a comprehensive understanding.

A further example is provided by the investigation described in Research in focus 2.8 and 27.3.



Research in focus 27.3

Mixed methods research and foot and mouth disease

In Research in focus 2.8, a mixed methods study (Poortinga et al. 2004) that was carried out at the height of the foot and mouth disease (FMD) outbreak in the UK was introduced as an example of a study that implies that quantitative and qualitative research can be combined. It was introduced at that point to illustrate the possibility of a mixed methods investigation.

The main rationale for the use of mixed methods research was in terms of completeness, in that the authors argue that a more comprehensive picture would be generated. In addition, the survey allowed focus group participants to be purposively sampled. In terms of rationale, therefore, following the categories outlined in Thinking deeply 27.3, completeness and sampling are the main uses of their mixed methods research. In terms of practice, six uses of mixed methods research could be discerned:

1. *Illustration.* The authors write that the focus group data were 'used to illustrate findings from the questionnaire' (Poortinga et al. 2004: 61).
2. *Completeness.* They write that the focus groups 'provided valuable additional information, especially on the reasons, rationalizations and arguments behind people's understanding of the FMD issue'.
3. *Triangulation.* Focus group findings 'reinforce' questionnaire findings (for example, few worried about health impacts on people) and reveal concern about government policies in the handling of FMD rather than the disease itself. This implies that there was also an element of *enhancement*, as the qualitative findings augmented the quantitative ones by clarifying the nature of concern about the disease.
4. *Explanation.* The authors suggest that, in Bude, the high trust ratings of local sources of information and the low trust ratings of government 'may well be a judgement of where these sources are thought to stand in this debate. . . . the focus groups suggested that trust judgements might reflect the extent to which sources are believed to protect people and their interests' (Poortinga et al. 2004: 88).
5. *Sampling.* As previously noted, the survey allowed the focus group participants to be purposively sampled.
6. *Enhancement.* This occurs on several occasions in this article. See the section on 'Enhancement' below for more on this aspect.

Process

One of the contrasts suggested by Table 17.1 is that, whereas quantitative research tends to bring out a static picture of social life, qualitative research is more processual. The term 'static' can easily be viewed in a rather negative light. In fact, it is very valuable on many occasions to uncover regularities, and it is often the identification of such regularities that allows a processual analysis to proceed. A mixed methods research approach offers the prospect of being able to combine both elements. For example, both Lacey (1976) and Ball (1981) conducted ethnographic studies of schools, in which the chief purpose was to explore processes of selection and socialization. However, in addition both researchers employed socio-metric questionnaires to examine pupils'

friendship patterns. Such questionnaires ask respondents to indicate those people with whom they interact and the frequency of interaction. The use of these research instruments allowed the stability of pupils' friendship patterns to be explored. The study by Laub and Sampson in Research in focus 27.4 provides an illustration of the use of mixed methods research in terms of regularities and process.

A further illustration is a study by Holdsworth (2006) of university students' experiences of student life in terms of their residential status (whether living away from home or at home). For the quantitative data, undergraduates at four higher educational institutions around Greater Merseyside were contacted by email or by electronic bulletin board to complete a web-based



Research in focus 27.4

Mixed methods research in the study of juvenile delinquency

An extremely unusual instance of mixed methods research is provided by the study referred to in Research in focus 3.13. Although the main data generated by Glueck and Glueck for this longitudinal study of juvenile delinquents in the USA were quantitative, a great deal of qualitative data were also collected (for example, interviews with research participants and their families). For their secondary analysis of the quantitative data that Glueck and Glueck had compiled, Laub and Sampson (1998: 220) were concerned to uncover 'the main predictors of desistance from criminal careers over time'. They used the qualitative data to compile a life history analysis that, when merged with the quantitative findings, would 'provide a more complete portrait of criminal offending over the life course' (Laub and Sampson 1998: 221). With the life history analysis of the qualitative data, Laub and Sampson were concerned to explore changes over the life course and how environmental factors interacted with change over time for each person examined.

The results of the secondary quantitative analysis were used to identify suitable candidates for the in-depth analysis required by the life history study. For example, the quantitative data demonstrated that job stability predicted desistance from crime. Accordingly, they selected for the life history study: cases where there was a combination of high job stability and no arrest in adult life; cases where there was a combination of low job stability and arrest in adult life; and cases that were inconsistent with the pattern of job stability and desistance being related. The same was done for marital attachment, as the quantitative data showed that being married was associated with desistance. The authors write:

our qualitative analysis was consistent with the hypothesis that the major turning points in the life courses of men who refrained from crime and deviance in adulthood were stable employment and good marriages. At the same time, we found that persistence in criminal behavior in adulthood often was the result of a developmental process of 'cumulative disadvantage' in which the negative influences of structural disadvantages (e.g., dropping out of school, having a criminal record or a dishonorable discharge from the military) persist throughout adult development. (Laub and Sampson 2004: 86)

In this way, the qualitative data were able to extend and amplify the quantitative findings. The cases that were inconsistent with the general pattern were also able to enhance the explanation: for example, the qualitative data suggested that alcohol abuse could offset the positive impact of marital attachment or job stability on desistance.

As noted in Research in focus 3.13, Laub and Sampson followed up fifty-two of the original participants at the age of 70. One reason was that they felt that Glueck and Glueck had emphasized 'behavioral continuity' and, as a result, the qualitative data in particular were not suited to examining 'behavioral change in the lives of the participants' (Laub and Sampson 2004: 90). This is an interesting instance of the way in which the assumptions of researchers have an impact on the kinds of data that are collected. The researchers decided to conduct life history interviews with the fifty-two men for various reasons. Most notably, it would allow them to shed light on how involvement in and/or desistance from crime over time was related to their personal circumstances as well as to the wider social context. They elicited life history narratives for those who maintained an involvement in crime, those who desisted, and those who were in and out of criminal activity. The key contribution that these new qualitative data provided was the significance of turning points in their interviewees' lives:

Changes in crime were associated in the narratives with a number of themes, including aging, employment, marriage, military service, excessive drinking, and personal choice. Of all the themes we have investigated, marriage turned up again and again in the narratives as a turning point. One former delinquent stated, 'If I hadn't met my wife at the time I did, I'd probably be dead.' (Laub and Sampson 2004: 95)

The significance of marriage as a turning point prompted the researchers to return to their quantitative data and to examine its importance. Their reanalysis of the data confirmed the importance of turning points and of marriage in particular.

questionnaire. Ten per cent of eligible students (3,282) completed the questionnaire. Qualitative interviews were then carried out with a sample of students who had signalled in their questionnaire responses that they were prepared to be interviewed. Interviewees were purposively sampled on the basis of answers they had given concerning such issues as gender, their residential status, and whether they were paying fees. In addition, six focus groups were conducted with prospective year 13 students at local schools and colleges. Holdsworth's theoretical framework for analysing her data was strongly influenced by the work of Bourdieu and in particular his concept of 'habitus'. The quantitative findings point strongly to clear differences in the student experience between those living at home and those living away. A thematic analysis of the interviews was designed 'to explore how students' habitus facilitates the process of fitting in and how the experience of leaving home is part of that process' (Holdsworth 2006: 505). Thus, while the quantitative data provide insight into broad differences between students, the qualitative data are used to explore the processes that lie behind the differences in experience revealed by the e-survey findings.

Different research questions

The research referred to in Research in focus 27.2 is an example of a research project in which quantitative and qualitative research were used in order to be able to answer different research questions.

- Questions about coverage, such as: how much coverage is there of social science research? What gets covered? Where? (method 1).
- Questions about the production of media items, such as: what kinds of attributes do journalists look for when thinking about whether to write an item on social science research? (methods 5 and 7).
- Questions about social scientists' attitudes to the media reporting of research in general (method 2) and to the reporting of their own research (methods 3 and 4). In addition, the research addressed social scientists' practices with regard to media coverage. Method 4 was designed to allow the findings deriving from method 3 to be elaborated and more fully understood.
- Questions about reception, such as: how do readers/viewers interpret media reporting of social science research? (method 8).
- Questions about the communication environment, such as: what are the policies of universities, government departments, and funding bodies concerning the media reporting of research? (method 6).

This form of mixed methods research entails making decisions about which kinds of research question are best answered using a quantitative research method and which by a qualitative research method and about how best to interweave the different elements, especially since, as suggested in the context of the discussion about triangulation, the outcomes of mixtures of methods are not always predictable.

Similarly, in my investigation of mixed methods research which is referred to in Research in focus 27.1, I had in mind different research questions for each of the two components of that investigation. With the content analysis, I wanted to know about the kinds of mixed methods research that are carried out in terms of issues such as:

- What kinds of research methods are employed in mixed methods research?
- Does the amount of mixed methods research vary by discipline?
- What are the reasons given for conducting mixed methods research?

In the interviews, I wanted to glean the perspectives of mixed methods researchers concerning current practice and the contingencies that they faced in their own mixed methods investigations. As such, I was especially interested in questions such as:

- Do mixed methods researchers see the approach as generating distinctive problems that are separate from the quantitative and qualitative components?
- How did they feel about the state of mixed methods research?
- Did they experience problems of integrating the quantitative and the qualitative data?

Research in focus 27.5 provides a further example of the linking of different research questions with particular research methods.



Research in focus 27.5

Mixed methods research in a study of political advertising

Parmelee et al. (2007) drew on evidence that young voters had felt alienated from the political advertising of the US presidential candidates (George W. Bush and John Kerry) during the election campaign of 2004. Their overarching research question was to explain how and why the political advertising had failed to engage young adults. They formulate three sub-questions to tackle this issue:

- How does the interaction between audience-level and media-based framing contribute to college students' interpretations of the messages found in political advertising?
- To what extent do those interpretations match the framing found in the ads from the 2004 US presidential election?
- How can political ads be framed better to engage college students? (Parmelee et al. 2007: 187)

Media-based frames refer to the ways in which the mass media frame the perception and salience of issues in such situations; audience-based frames are the prior cognitive structures members of audiences bring to bear on their interpretation of media items. Focus groups were employed to examine the first and third research questions. There were four groups with 5, 6, 7, and 14 18–28-year-olds. A mixture of quantitative content analysis and focus groups was employed in relation to the second question. As the authors put it:

Qualitative focus groups of college students examined how young voters interpret the salience of political advertising to them, and a quantitative content analysis of more than 100 ads from the 2004 presidential race revealed why focus group participants felt so alienated by political advertising. (Parmelee et al. 2007: 184)

In this study, the research methods are very explicitly tied to the *different research questions*. The authors were able to *triangulate* the two sets of findings. They write that the content analysis data 'helped to confirm findings from the focus groups as well as explain why focus group participants felt so alienated by political advertising' (2007: 190). Both sets of data confirmed that the advertising had failed to address the needs of young adults (for example, by emphasizing issues like pensions) and tended to make negative remarks about opposition candidates, which the young people disliked. They also write that 'the qualitative and quantitative methods were integrated in a way so that each could shore up the weaknesses of the other, as well as provide confirmation and elaboration' (2007: 196). Here we see a suggestion of what is referred to in Thinking deeply 27.3 as *offset* but also elements of *triangulation* ('confirmation') and *enhancement* ('elaboration'). For example, the content analysis confirmed complaints from the focus groups regarding the negative tone of the advertising but at the same time some participants liked the negativity when it was laced with humour.

Explanation

One of the problems that frequently confronts quantitative researchers is how to explain relationships between variables. One strategy is to look for what is called an intervening variable, which is influenced by the independent variable but which in turn has an effect on the dependent variable. Thus, if we find a relationship between ethnicity and occupation, we might propose that education is one factor behind the relationship, implying:

ethnicity → education → occupation.

This sequence implies that the variable ethnicity has an impact on people's education (for example, how much education people of different ethnic groups tend to undergo), which in turn has implications for the kinds of jobs that people of different ethnic groups attain. An alternative approach might be to seek to explore the relationship further by carrying out a qualitative study.

An example is provided by research on HIV-related risk behaviour among drug injectors by Barnard and Frischer (1995). Data from structured interviews with 503 injectors in Glasgow revealed that 'females report significantly higher levels of needle sharing, sexual activity

and AIDS awareness than their male counterparts. Furthermore, women who are co-habiting with sexual partners who are themselves injectors are particularly likely to report high levels of risk behaviour and also AIDS awareness' (Barnard and Frischer 1995: 357). What are the factors that produced this pattern of relationships between gender, risk behaviour, and co-habitation? Semi-structured interviews with seventy-three injectors in Glasgow were also conducted. The authors suggest that the relationships between these variables 'can be explained by the tendency for women to be in sexual relationships with men who themselves inject and with whom they are unlikely to use condoms' (Barnard and Frischer 1995: 360). Once again, we see an instance of light being shed on relationships between variables derived from quantitative research by a related qualitative one.

In the research by Bickerstaff et al. (2008) on climate change and radioactive waste, the survey evidence suggested strongly that concerns about risk were far greater about radioactive waste than for climate change. The focus groups helped the researchers to explain this finding. The focus group participants tended to view climate change as something that would occur somewhere else and would not have an impact on their daily lives. Also, whereas 'climate change lacked a deeply affective cultural imagery' (Bickerstaff et al. 2008: 152), the focus group participants were able to draw on a rich stock of images concerning the nuclear industry in the UK that was to do with errors, the control of the technology, and possible problems of waste getting into the wrong hands.

Unexpected results

The outcomes of research are not always easy to anticipate. Although people sometimes cynically suggest that social scientists find what they want to find or that social scientists just convey the obvious, the capacity of the obvious to provide us with puzzling surprises should never be underestimated. When this occurs, employing a research method associated with the research strategy that was not used initially can be helpful. One context in which this might occur is when qualitative research is used as a salvage operation, when an anticipated set of results from a quantitative investigation fails to materialize (Weinholtz et al. 1995). Research in focus 27.6 provides an interesting illustration of this use of mixed methods research.

A somewhat different form of this category of mixed methods research occurs when researchers are interested in generating data that will allow them to address a specific research question or hypothesis but at the same time want to leave open the possibility of coming

up with unanticipated findings. Usually, the quantitative research methods are deployed to address a specific hypothesis, while the usually more open-ended qualitative methods are designed to allow novel, unexpected findings to emerge. In the cross-cultural study described in Research in focus 27.7, the authors were concerned to address the hypothesis that 'parents structure and participate in activities with their children in ways that resonate with their cultural beliefs' (Harkness et al. 2006: 68). While both the quantitative and the qualitative research methods were seen as relevant to this hypothesis, the qualitative component threw up some unexpected findings. One of these was a cultural practice that had not been documented previously. The authors call this 'Swedish parent-child co-sleeping'. The researchers noted through interviews and informal home visits that, among Swedish families, children were spending a large amount of their night-times sleeping in their parents' bedrooms. This finding prompted the researchers to ask specific questions about this practice in later interviews, and questionnaires were devised to glean further details. The authors write: 'Close analysis of the Swedish co-sleeping findings, using both qualitative and quantitative methods, provided a new way to access Swedish cultural models of the child and the family, particularly in relation to cultural ideas about gender and equality' (Harkness et al. 2006: 75). Also, the finding encouraged the researchers in the other countries to ask explicit questions about children and night-time behaviour.

This category of mixed methods research is more or less impossible to plan for. It essentially provides the quantitative researcher with an alternative either to reconstruct a hypothesis or to file the results away (and probably never to look at them again) when findings are inconsistent with a hypothesis. It is probably not an option in all cases in which a hypothesis is not confirmed. There may also be instances in which a quantitative study could shed light on puzzling findings drawn from a qualitative investigation.

Instrument development

The in-depth knowledge of social contexts acquired through qualitative research can be used to inform the design of survey questions for structured interviewing and self-completion questionnaires. Pope and Mays (1995) point out that semi-structured interviewing took place before a British national survey on sexual attitudes and lifestyles (Wellings et al. 1994), so that the most appropriate sexual terms to be used in the survey questions could be decided. The interviews revealed considerable misunderstanding about many terms. Laurie and



Research in focus 27.6

Using mixed methods research to solve a puzzle: the case of displayed emotions in convenience stores

An example of combining quantitative and qualitative research to solve a puzzle is Sutton and Rafaeli's (1988) study of the display of emotions in organizations. Following a traditional quantitative research strategy, based on their examination of studies like Hochschild (1983), Sutton and Rafaeli formulated a hypothesis suggesting a positive relationship between the display of positive emotions to retail shoppers (smiling, friendly greeting, eye contact) and the level of retail sales. In other words, we would expect that, when retail staff are friendly and give time to shoppers, sales will be better than when they fail to do so. Sutton and Rafaeli had access to data that allowed this hypothesis to be tested. The data derived from a study of 576 convenience stores in a national retail chain in the USA. Structured observation of retail workers provided the data on the display of positive emotions, and sales data provided information for the other variable. The hypothesis implied that there would be a positive relationship—that is, stores in which there was a more pronounced display of positive emotions would report superior sales. When the data were analysed, a relationship was confirmed, but it was found to be negative; that is, stores in which retail workers were less inclined to smile, be friendly, and so on tended to have better sales than those in which such emotions were in evidence. This was the reverse of what the authors had anticipated that they would uncover. Sutton and Rafaeli (1992: 124) considered restating their hypothesis to make it seem that they had found what they had expected, but fortunately resisted the temptation! Instead, they conducted a qualitative investigation of four case study stores to help understand what was happening. This involved a number of methods: unstructured observation of interactions between staff and customers; semi-structured interviews with store managers; brief periods of participant observation; casual conversations with store managers, supervisors, executives, and others; and data gathered through posing as a customer in stores. The stores were chosen in terms of two criteria: high or low sales and whether staff typically displayed positive emotions. The qualitative investigation suggested that the relationship between the display of positive emotions and sales was negative, but that sales were likely to be a cause rather than a consequence of the display of emotions. This pattern occurred because, in stores with high levels of sales, staff were under greater pressure and encountered longer queues at checkouts. Staff therefore had less time and inclination for the pleasantries associated with the display of positive emotions. The quantitative data were then reanalysed with this alternative interpretation in mind and it was supported.

Thus, instead of the causal sequence being

Display of positive emotions → Retail sales

it was

Retail sales → Display of positive emotions

This exercise also highlights the main difficulty associated with inferring causal direction from a cross-sectional research design.

Sullivan (1991) report that, before the first wave of data collection for the British Household Panel Survey (BHPS; see Research in focus 3.10), qualitative research was conducted through 'depth interviews' and 'group discussions'. One of the main purposes of this phase was 'to clarify terminologies and concepts about intra-household

allocative processes in order to aid in the development of questions for the panel questionnaire' (Laurie and Sullivan 1991: 114). Walklate (2000) explains that, for her research on fear of crime and safety issues in two areas with high rates of crime, a survey using traditional questions about victimization was used. However, the

questions were amended to reflect the local context following six months of gaining a detailed knowledge of the area through interviews, ethnography, and examination of local newspapers. Livingstone (2006) reports that the findings deriving from focus groups with children concerning their use of the Internet (see Table 21.1) were used to inform the content of questions concerning online privacy in a subsequent questionnaire survey. The

Cultural Capital and Social Exclusion (CCSE) researchers report that their questionnaire was 'informed by the evidence of cultural tastes and practices derived from a prior discussion of 25 focus groups' (Silva et al. 2009: 302; see also Table 21.1). An example of the use of mixed methods research in the context of instrument development in a cross-cultural study can be found in Research in focus 27.7.



Research in focus 27.7

Mixed methods research in a cross-cultural investigation

Harkness et al. (2006) provide an interesting example of mixed methods research in relation to a seven-nation investigation of research into cultural context of children's development in home and school and transition from home to school. The seven nations were: Australia, Italy, the Netherlands, Poland, Spain, Sweden, and the USA.

Sixty families per nation were recruited, with the target children stratified in age groups up to age 8. Data were gleaned from parents through semi-structured interviews and week-long diaries dealing with their child's activities. These provided the qualitative component of the study. Parents also completed several questionnaires to do with areas such as: sources of advice and support; child's temperament; child's first contact with school; and child's qualities related to school success.

The combination of quantitative and qualitative research served several purposes for the researchers. It provided the opportunity to use a *triangulation* approach, whereby they were able to test their central hypothesis that 'parents structure and participate in activities with their children that resonate with their cultural beliefs' through both quantitative and qualitative findings (Harkness et al. 2006: 68). Another key contribution of their mixed methods approach was that the qualitative findings informed the *instrument development* by developing measures in the questionnaires, so that these 'would be reliable and valid for the various cultural sites' (Harkness et al. 2006: 69).

Sampling

One of the chief ways in which quantitative research can prepare the ground for qualitative research is through the selection of people to be interviewed. This can occur in several ways. In the case of the research on the reporting of social science research in the British mass media (see Research in focus 27.2), a content analysis of media content (method 1) was used as a source of data in its own right. However, it also served as a means of identifying journalists who had reported relevant research (method 5). In addition, replies to questions in the general survey of social scientists (method 2) were used to help identify two groups of social scientists—those with particularly high and those with low levels of media

coverage of their research—who would then be interviewed with a semi-structured approach (method 4).

Another example is a study of mental well-being among members of a multinational IT company in England by Thøgersen-Ntoumani and Fox (2005). The authors sent email invitations to all members of the company to complete a questionnaire on the Web (see Chapter 28 for the use of Web-based survey research). A 33 per cent response rate was achieved. At the end of the questionnaire, respondents were asked whether they were prepared to be interviewed. The questionnaire comprised various measures, such as a Satisfaction with Life Scale, an assessment of physical activity, and the Brayfield–Rothe job satisfaction scale, which allowed

respondents to be classified in terms of their being at risk or in need in terms of their mental well-being. An analysis of the questionnaire data resulted in four categories of employee being generated: self-assured; exercising happy; unhappy; and physically unhappy. Individuals were then selected to be interviewed using a semi-structured guide on the basis of their membership of the four categories of employee generated from the analysis of the survey data, although gender and age were also considered in the selection of who should be interviewed. In the case of both these studies, quantitative data generated from a survey were used as criteria for the sampling of individuals to be interviewed by semi-structured interview. The surveys provided the data for generic purposive sampling of the interviewees.

Jamieson (2000) reports that for a study of offending she administered a self-completion questionnaire to a sample of young men in which they reported criminal offences. On the basis of their replies, equal numbers of young men were interviewed using a qualitative interview in each of three categories: those who did not offend; those who had offended but not recently; and persistent offenders. A similar use of mixed methods research can be seen in the example in Research in focus 27.3. Laub and Sampson (1998) in the study described in Research in focus 27.4 used quantitative data on criminal activity as a means of selecting people for further study. Similarly, the CCSE researchers purposively sampled individuals for the qualitative interview phase of the research on the basis of their replies to questionnaires (see the section on 'Generic purposive sampling in a mixed methods context' in Chapter 18).

Credibility

When credibility is the rationale for mixed methods research, the emphasis tends to be upon the symbolic virtues of the approach in terms of its capacity to bestow legitimacy on the research and its outputs. Milkman (1997: 192), for example, has suggested in the context of her research on a General Motors factory that the promise that she 'would produce "hard", quantitative data through survey research was what secured [her] access', even though she had no experience in this method. Milkman's predilection was towards a qualitative approach, relying mainly on semi-structured interviews with a variety of individuals and stakeholders in the factory, but she clearly felt including a quantitative component, in this case a survey, would secure the access she needed.

In this example, the researcher is using mixed methods research to gain credibility in the eyes of the organization

in which she wanted to conduct her fieldwork. Sometimes mixed methods research is conducted because it is believed to have greater credibility among audiences. These may be audiences of different kinds, such as: supervisors; dissertation examiners; research funding agencies; policy-makers; and potential readers. For example, Rocheleau (1995) included a questionnaire in conjunction with a qualitative study in the field of political ecology because she and her research team felt that the survey data would be more familiar and acceptable to policy-makers. She admits that the inclusion of the questionnaire in the research was 'cynical', as she puts it, because in fact she and her team felt that the qualitative data would be far more insightful. Similarly, when I conducted interviews with mixed methods researchers, some of my interviewees confessed that they sometimes used mixed methods research because they felt it would be more likely to get funded (Bryman 2007b). For example, one interviewee said:

And also . . . and I don't know how true this is, but I think there's been a general perception . . . that the ESRC had . . . undergone quite a quantitative turn and that there was a concern about the lack of quantitative research [a] concern about lack of quantitative skills and that they particularly kind of favoured projects that used mixed methods or had a strong quantitative component. And so, I tend to use them because strategically I think it's a good idea.

In other words, in the view of this interviewee, mixed methods research was more likely to be funded because it was perceived as having greater credibility among those responsible for funding social science research.

Context

The typical circumstance for this approach to mixing methods was for a qualitative study to provide the context for understanding broad-brush quantitative findings. An example is provided by research reported by Phillipson et al. (1999). The research was concerned with older people's experiences of community life in three English urban areas: Bethnal Green, Wolverhampton, and Woodford. Each of these areas had been the focus of earlier research on this general topic in the 1940s or 1950s. As such, this comparative case study research permitted a longitudinal element by allowing comparisons to be drawn with previous findings. A questionnaire survey of around 200 older people in each of these three locations was conducted and was designed to explore the

extent of change since the earlier studies and such issues as experiences of assistance from neighbours. Qualitative interviews were conducted with sixty-two older people who had participated in the survey. In the qualitative interviews, questions were asked partly to allow contrasts with the earlier investigations but also in order to 'provide a context for the information about social networks gleaned from the survey' (Phillipson et al. 1999: 723). For example, at one point the authors present some statistical findings concerning whether people could find something they liked about their area. Most (79 per cent) could find something they liked, but this varied quite a lot, with Woodford residents being more likely than Bethnal Green ones to be able to mention a feature they liked. However, the qualitative interviews provided insights into what it was about the areas that people liked. For example, having a community feeling was viewed positively, with one elderly woman in Woodford saying: 'More like a village. Everybody knows everyone else. It is very friendly' (Phillipson et al. 1999: 723). The authors note that Bethnal Green residents were especially likely to mention having roots in an area as being of particular significance, as when one woman said: 'It's my home, my roots are here now. It's what I'm used to . . . living here and working here for so many years' (Phillipson et al. 1999: 724). In this example, the qualitative findings allow the quantitative data to be contextualized. We understand the statistical data better because we have an appreciation of the nature of the areas in which the surveys were conducted and the motives and preferences of their members.

Illustration

Sometimes, mixed methods researchers find it useful to employ little vignettes from their qualitative findings to illustrate some of their quantitative findings. The latter can often seem remote and cold, while some rich interview material can be employed to put some flesh on the bare bones of statistical data. An example of the use of mixed methods research in this way can be discerned from the CCSE research referred to in Research in focus 2.9 and above. The researchers used the survey data to establish dimensions on which respondents differed in terms of their cultural activities and taste. Sometimes, they employ passages from their interview transcripts to illustrate positions in relation to the dimensions. For example, the researchers found that, of all the areas of cultural tastes, visual art differentiates people more than any other. The authors use the case of Margaret, who has a moderate engagement with visual art and for whom it is merely decorative around the house.

Margaret . . . if I put that boat picture up there like that wouldn't do anything for my kitchen . . . I'm sort of trying to get things that would suit my kitchen you know and that does . . . you know, you have . . . It took me about three or four days to get those pictures for in here [pointing to framed pictures of flowers on the wall]. Do you know what I mean; I just didn't go out and get the first thing that I saw.

In this passage, 'that boat picture' is a painting by J. M. W. Turner—*The Fighting Temeraire Tugged to her Last Berth to be Broken Up* (1838)—which interviewees were asked to discuss. A rather different position in relation to visual art is revealed by Cynthia, who has close connections with the art world:

Cynthia A great friend who was in the art world . . . she was a 19th century expert and through her, I got to like [name] . . . and we've got one picture of his and that has gone up mad in value as you can imagine, wonderful. . . . But the ones I really like, Turner . . . he was actually a friend of my father's and I was taken to see his studios and things like that and I've got quite a lot of not original [inaudible] tiny little thing when he scribbled something to my father, but that's about all.

It is striking that Cynthia is a great deal more confident discussing art as well as knowledgeable about the art world and some of its key players. She and Margaret represent different positions in relation to this differentiating aspect of cultural taste. Illustration was also a feature of the research reported in Research in focus 27.3.

Utility

For some writers and researchers, mixed methods research is preferred because it is felt that it is more likely to generate findings that will have utility. This is more likely to be a concern among researchers in fields with a strong disposition towards findings having practical benefits. For example, one of my interviewees said of mixed methods research: 'The main reason I use it and the main reason I will probably always put it on grant applications is because of the issues around needing to . . . generate data that's . . . suitable for policy-makers.' This interviewee went on to add: 'I think by doing both

methods, it enables you . . . to speak to kind of policy audiences and to speak to academic audiences.' By way of further illustration of utility as a rationale for mixed methods research, Pernice (1996) conducted both quantitative and qualitative research on unemployed people in New Zealand. She found that the questionnaire data revealed that most members of the sample wanted a job. However, qualitative data gleaned from interviews revealed a more complex set of attitudes with regard to intentions towards employment. Many spoke about alternatives to paid employment that they were considering and also revealed in interviews a more nuanced set of attitudes towards employment than was being (or could be) revealed through the questionnaires. Pernice (1996: 348) argues that not only was her understanding of unemployment enhanced through mixed methods research, but also, 'if only quantitative approaches are taken, our understanding of unemployment will not be deep enough to formulate effective solutions'.

Confirm and discover

The most common form of this rationale for mixed methods research is that the inferences that are derived from a qualitative study are then subsequently tested with quantitative research. An example is a study by Tripp et al. (2002) of revenge in the workplace. Initially, eighty-eight working MBA students in the USA were asked to give an account of two incidents in which the student or someone else had sought to gain revenge against another person. The revenge episodes were examined to establish the activities involved in taking revenge. The overriding finding was that there should be symmetry between the initial episode and the revenge. This symmetry has two elements: symmetry of consequences—the revenge should do the same amount of harm as the original wrongdoing; and symmetry of method—the way in which revenge is exacted should resemble that involved in the initial harm that was done. Drawing on this distinction, the researchers conducted a second study, using an experimental design, to test their prediction, which emerged out of the qualitative study, that 'the symmetry of consequences will influence individual judgments of revenge [and] symmetry of method should shape individual judgments about revenge' (Tripp et al. 2002: 972–3). In fact, the experiment did not entirely support these expectations. When revenge is symmetric in terms of consequences, the experiment showed that the vengeful act is viewed more positively. This was in line with the researchers' expectations. However, symmetry of method operated in a manner contrary to their expectations:

vengeful acts were viewed *more* harshly when they were symmetric with the original harmful act.

Diversity of views

Sometimes, researchers want to gather two kinds of data: qualitative data that will allow them to gain access to the perspectives of the people they are studying; and quantitative data that will allow them to explore specific issues in which they are interested. When this occurs, they are seeking to explore an area in both ways, so that they can both adopt an unstructured approach to data collection in which participants' meanings are the focus of attention and investigate a specific set of issues through the more structured approach of quantitative research. An example of this is Milkman's (1997) study of a General Motors car manufacturing plant in the USA.

She was interested in the nature of the labour process in the late twentieth century and whether new factory conditions were markedly different for car production workers from the negative portrayals of such work in the 1950s and early 1960s (e.g. Blauner 1964). As such, she was interested in the meaning of industrial work. She employed semi-structured interviews and focus groups with car production workers to elicit data relevant to this aspect of her study. However, in addition she had some specific interests in a 'buyout' plan that the company's management introduced in the mid-1980s after it had initiated a variety of changes to work practices. The plan gave workers the opportunity to give up their jobs for a substantial cash payment. In 1988 Milkman carried out a questionnaire survey of workers who had taken up the company's buyout offer. These workers were surveyed again the following year and in 1991. The reason for the surveys was that Milkman had some very specific interests in the buyout scheme, such as the reasons for workers taking the buyout, how they had fared since leaving General Motors, how they felt about their current employment, and differences between social groups (in particular, different ethnic groups) in current earnings relative to those at General Motors.

A further example is the research on school size differences that was referred to in Research in focus 12.1. One of the aims of this study was the exploration of the relationships between class size and various aspects of classrooms. As noted in Research in focus 12.1 and elsewhere in Chapter 12, Blatchford and his colleagues collected quantitative data, drawing on structured observation of classrooms and questionnaires. The data that were generated reflected the preoccupations of the research team. However, Blatchford (2005) reports that they also wanted to capture teachers' experiences and to

that end conducted semi-structured interviews and conducted detailed case studies of particular classes. Further, the various qualitative findings relating to the differences between large and small classes influenced later questionnaires that were developed (a case of 'instrument development').

Enhancement

In the Poortinga et al. (2004) article on the foot and mouth disease (FMD) crisis (see Research in focus 2.8 and 27.3), enhancement occurs on several occasions. For example, as noted above in the section on triangulation, at one point the authors note that their focus group data regarding the perceived causes of the outbreak were more or less the same as the causes identified in their questionnaire survey but they also qualified this assertion. Another example is when they note another correspondence between their quantitative and their qualitative data: 'The findings of the focus groups reinforce those of the questionnaire regarding general concern' (Poortinga et al. 2004: 78). However, they then go on to note that the picture from the focus groups is slightly more complex than if one relies on the survey data alone, and they quote a focus group participant to exemplify this point:

In terms of health impacts, people were worried that rotting carcasses of culled animals, which in some cases were not put onto a funeral pyre immediately, would

spread various diseases, and also because of toxins being emitted from the fires. That is, people were more concerned about health risks arising from government policy measures and handling of FMD than about the disease itself.

I think a lot of people are genuinely concerned about the fires, the toxins coming out in the fires, that became quite an issue. And that is one of those things that we probably won't know if there is any kind of come back on it, we probably won't know for a few years and that is quite a concern. (Norwich, Male) (Poortinga et al. 2004: 78)

In the study by Bickerstaffe et al. (2008) referred to above, the survey evidence suggested that the causes of climate change (car use, energy use, and so on) were more likely to be seen as beneficial to respondents themselves and to society than causes of radioactive waste (for example, nuclear power production). The focus group data elaborated the causal inferences that were being made in the surveys. For example, when talking about energy-consuming facets of modern life such as transport and heating, focus group participants tended to emphasize the benefits rather than the risks. The adverse effects of these on the environment were regarded as unavoidable features of modernity. Research in focus 27.8 provides another example of enhancement.



Research in focus 27.8

Combining survey research and qualitative interviewing in a study of managers

Wajcman and Martin (2002) conducted survey research using a questionnaire on male and female managers (470 in total) in 6 Australian companies. The authors were interested in career orientations and attitudes. They also conducted semi-structured interviews with 136 managers from the six companies. The survey evidence showed that male and female managers were generally more similar than different in terms of most variables. Thus, contrary to what many people might have anticipated, women's career experiences and orientations were *not* distinctive. They then examined the qualitative interviews in terms of narratives of identity. Wajcman and Martin found that both male and female managers depicted their careers in 'market' terms (as needing to respond to the requirements of the managerial labour market to develop their skills, experience, and hence career). *But*, whereas, for men, narratives of career meshed seamlessly with narratives of domestic life, for women there was a disjuncture. Female managers found it much harder to reconcile managerial identities with domestic ones. They needed to opt for one. Thus, choices about career and family are still gendered. This research shows how a mixed methods research approach was able to reveal much more than could have been gleaned through one approach alone by collecting evidence on both career patterns and expectations and identities using research methods suited to each issue area.



Reflections on mixed methods research

There can be little doubt that mixed methods research is becoming far more common than when I first started writing about it (Bryman 1988a). Two particularly significant factors in prompting this development are:

1. a growing preparedness to think of research methods as techniques of data collection or analysis that are not as encumbered by epistemological and ontological baggage as is sometimes supposed, and
2. a softening in the attitude towards quantitative research among feminist researchers, who had previously been highly resistant to its use (see Chapter 17 for a discussion of this point).

Other factors are doubtlessly relevant, but these two developments do seem especially significant. However, it is important to realize that mixed methods research is not intrinsically superior to mono-method or mono-strategy research. It is tempting to think that mixed methods research is more or less inevitably superior to research that relies on a single method on the grounds that more and more varied findings are inevitably 'a good thing'. Indeed, social scientists sometimes display such a view (Bryman 2006b).

However, several points must be borne in mind. These reflections are influenced by recent writings concerned with indicators of quality in mixed methods research (e.g. Bryman et al. 2008; O'Cathain et al. 2008).

1. Mixed methods research, like mono-method research, must be competently designed and conducted. Poorly conducted research will yield suspect findings, no matter how many methods are employed.
2. Just like mono-method or mono-strategy research, mixed methods research must be appropriate to the research questions or research area with which you are concerned. There is no point collecting more data simply on the basis that 'more is better'. Mixed methods research has to be dovetailed to research questions, just as all research methods must be. It is, after all, likely to consume considerably more time and financial resources than research relying on just one method.
3. It is best to be explicit about why you have conducted mixed methods research. Providing a rationale for its use gives the reader a better sense of the relationship between the research questions and the research

methods and also what the use of two or more methods was meant to achieve in terms of the overall project.

4. Try not to think of mixed methods research as made up of separate components. It is best to consider how the quantitative and qualitative components are related to each other from the outset. There is a feeling among many writers with an interest in such research that many so-called mixed methods projects are not really mixed at all because the researchers do not adequately integrate their quantitative and qualitative findings. This is particularly evident when researchers present and discuss their quantitative and qualitative findings separately rather than bringing the evidence together. We will return to this issue in Chapter 29.
5. Make sure that you provide a sufficiently detailed account of all the methodological details of the research for both the quantitative and the qualitative components. Sometimes researchers provide more detail concerning one element or give only a surface treatment of both. So, make sure that information about sampling, design and administration of research instruments, analysis of the data, and the like are provided for both components.
6. Any research project has limited resources. Employing mixed methods research may dilute the research effort in any area, since resources would need to be spread.
7. By no means all researchers have the skills and training to carry out both quantitative and qualitative research, so that their 'trained incapacities' may act as a barrier to integration (Reiss 1968: 351). However, there is a growing recognition of the potential of mixed methods research, so that this point probably carries less weight than it did when Reiss was writing.

In other words, mixed methods research should not be considered as an approach that is universally applicable or as a panacea. It may provide a better understanding of a phenomenon than if just one method had been used. It may also frequently enhance our confidence in our own or others' findings—for example, when a triangulation exercise has been conducted. It may even serve a tactical purpose of enhancing the credibility of an application for

research funding or a publication, especially when it is borne in mind that some writers believe that mixed methods research has become methodologically fashionable (Sandelowski 2003). However, as I have tried to

suggest with these final reflections, mixed methods research is subject to the same (or at least very similar) considerations and constraints as any research method or design.



Thinking deeply 27.4

Are the paradigm wars over?

The period during which many commentators viewed quantitative and qualitative research as based on incompatible assumptions is often referred to as the 'paradigm wars' (Hammersley 1992c; Oakley 1999) or the 'paradigm debate' (Creswell and Plano Clark 2011). The growing popularity of mixed methods research would seem to signal the end of the paradigm wars, as it is sometimes represented as having given way to pragmatism. Many of the contributors to Tashakkori and Teddlie's (2003, 2010) *Handbook* appear to be committed to a pragmatist position. However, there are signs that the paradigm wars have not entirely disappeared but have resurfaced in slightly different ways (Bryman 2008). One of these is the growing predilection for systematic reviews of the literature, particularly in areas of the social sciences with a strong applied focus (see Key concept 5.1 and Research in focus 5.1 and the discussion in Chapter 5 of this approach to reviewing the literature). Several writers have noted that the proponents of systematic review advocate its use in terms of principles that are very much associated with quantitative research and its positivist foundations. They tend to attribute to it qualities such as reliability, replicability, transparency of procedures, and greater comprehensiveness, and suggest that it is more objective (Hammersley 2001; MacLure 2005). These attributes have strong affinities with quantitative research. In contrast, the critics of systematic review tend to emphasize what systematic review does *not* do and what traditional narrative reviews are capable of achieving. The critics of systematic review highlight features of systematic review that are associated with qualitative research and its interpretivist foundations. They tend to emphasize the significance of interpretation in narrative literature reviews and the importance of understanding and locating findings within the entire study of which the findings are a part. They also suggest that systematic review neglects intertextuality—the links between studies and their findings—whereas it is standard practice in a literature review to explore such links. The key point to register at this point is that this debate has several of the hallmarks of the paradigm arguments.



Checklist

Issues to consider when planning, conducting, and writing up mixed methods research

- ☐ Have you made sure you have all the necessary skills in advance for undertaking all the components of a mixed methods project?
- ☐ Have you planned the project as a mixed methods one and not as a project with separate components?
- ☐ Have you built integration of the quantitative and qualitative elements into your plans from the outset?
- ☐ Are you clear in your own mind about why you are doing a mixed methods study? (Do not assume doing mixed methods research is inherently superior.)

- ☐ When writing up the research, have you made clear your rationale(s) for doing a mixed methods study?
- ☐ Have you shown clearly how the research methods you intend to use (if a proposal) or employ (when writing up) relate to your research questions?
- ☐ Have you integrated your quantitative and qualitative findings? Have you shown how they are mutually informative and not treated them as separate?
- ☐ Have you demonstrated what is gained by doing mixed methods research?
- ☐ Have you provided details about how you conducted the quantitative and qualitative components (sampling, instrument design and implementation, analysis, etc.)?



Key points

- While there has been a growth in the amount of mixed methods research, not all writers support its use.
- Objections to mixed methods research tend to be the result of a view that there are epistemological and ontological impediments to the combination of quantitative and qualitative research.
- There are several different ways of combining quantitative and qualitative research and of representing mixed methods research.
- The outcomes of combining quantitative and qualitative research can be planned or unplanned.
- Mixed methods research is not necessarily superior to mono-method research.



Questions for review

- What is mixed methods research?

The argument against mixed methods research

- What are the main elements of the embedded methods and paradigm arguments in terms of their implications for the possibility of mixed methods research?

Two versions of the debate about quantitative and qualitative research

- What are the main elements of the technical and epistemological versions of the debate about quantitative and qualitative research? What are the implications of these two versions of the debate for mixed methods research?

Approaches to mixed methods research

- What is the significance of priority and sequence as ways of classifying mixed methods research?
- What are the chief ways in which quantitative and qualitative research have been combined?
- Why might it be useful to distinguish between them?
- What is the logic of triangulation?
- Traditionally, qualitative research has been depicted as having a preparatory role in relation to quantitative research. To what extent do the different forms of mixed methods research reflect this view?

Reflections on mixed methods research

- Why has mixed methods research become more prominent?
- Is mixed methods research necessarily superior to mono-method research?
- To what extent does the rise of mixed methods research suggest that the paradigm wars are over?

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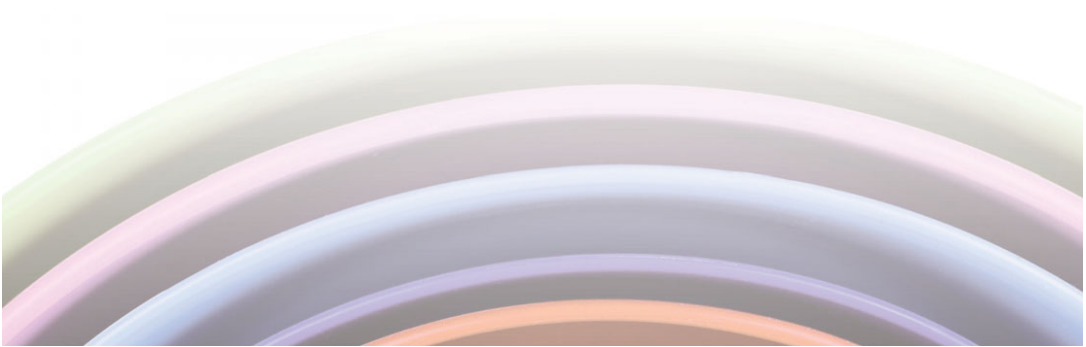
Visit the Online Resource Centre that accompanies this book to enrich your understanding of mixed methods research. Consult web links, test yourself using multiple choice questions, and gain further guidance and inspiration from the Student Researcher's Toolkit.

28

E-research: Internet research methods

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Chapter guide

This chapter is concerned with the ways in which the Internet can be used in research. Most readers will be familiar with using the Internet as a means of searching for material on companies or on topics for essays and various other uses. It can be very valuable for such purposes, but this kind of activity is not the focus of this chapter. Instead, we are concerned with the ways in which Internet websites can be used as objects of analysis in their own right and with the ways that the Internet can be used as a means of collecting data, much like the post and the telephone.

Introduction

There can be little doubting that the Internet and online communication have proliferated since the early 1990s and indeed since the publication of the first edition of this book in 2003. For the UK, it has been estimated that internet usage between 2000 and 2009 increased by 203 per cent (www.internetworldstats.com/stats4.htm#europe (accessed 31 March 2010)), while the Office for National Statistics has estimated that in 2009 70 per cent of households had access to the Internet (www.statistics.gov.uk/cpi/nugget.asp?ID=88 (accessed 31 March 2010)). It would be surprising if this boom did not have implications for the practice of social research, and, as we will show, researchers have been quick to take advantage of the many research possibilities offered by the Internet.

The ongoing and burgeoning nature of the Internet and online communication makes it difficult to characterize this field and its impact on social research and its conduct in any straightforward and simple way. In this chapter, I will be concerned with the following areas of e-research:

1. World Wide Web sites or pages as objects of analysis;
2. using the World Wide Web or online communications as a means of collecting data from individuals and organizations.

In addition, I will address some of the broader implications and ramifications of the Internet for conducting social research.

While the choice of these two areas of online research and their classification is rather arbitrary and tend to shade into each other somewhat, they provide the basis for a reasonably comprehensive overview in the face of a highly fluid field. This chapter does not consider the use of the Internet as an information resource or as a means of finding references. Some suggestions about the latter can be found in Chapter 5. The Internet is a vast information resource and has too many possible forms to be covered in a single chapter. Moreover, I advise caution about the use of such materials; while the Internet is a cornucopia of data and advice, it also contains a great deal of misleading and downright incorrect information. Healthy scepticism should guide your searches.



The Internet as object of analysis

Websites and web pages are potential sources of data in their own right and can be regarded as potential material for both quantitative and qualitative content analysis of the kind discussed in Chapters 13 and 23. Indeed, in the latter chapter, there is a section on 'Virtual documents' that draws attention to websites as a form of document

amenable to analysis. Sillince and Brown (2009), for example, examined the Internet websites of all English and Welsh police constabularies October 2005–March 2006. The websites were analysed to explore how the constabularies' organizational identities as displayed in the websites were rhetorically constructed. Through

a rhetorical analysis of such documents, Sillince and Brown (2009) show that organizational identity was rhetorically constructed through core themes:

1. the constabulary as effective or ineffective;
2. the constabulary as part of the community or as apart from the community;
3. the constabulary as progressive or not progressive.

Within each of these three organizational identity constructions Sillince and Brown identified distinctive rhetorical manoeuvres. Thus, with the last of the three themes, the identification of the constabulary as progressive or not progressive was often placed within a wider narrative of improvement, particularly from being not progressive to progressive. Of particular theoretical significance is the investigation's finding on the basis of the analysis that organizational identity is not unitary but is often conflicting and ambiguous and is designed to support claims to legitimacy for both internal and external audiences.

However, there are clearly difficulties with using websites as sources of data in this way. Four issues were mentioned in Chapter 23. In addition to the issues raised there, the following additional observations are worth considering:

- You will need to find the websites relating to your research questions. This is likely to mean trawling the Web using a search engine such as Google. However, any search engine provides access to only a portion of the Web. Dorsey, Steeves, and Porras (2004) used several search engines to find websites that promote ecologically sensitive tourism, and even then there is evidence that the combined use of several search engines will allow access to only just under a half of the total population of websites (Ho et al. 2002). While this means that the use of several search engines is highly desirable when seeking out appropriate websites, it has to be recognized that not only will they allow access to just a portion of the available websites but also they may be a biased sample.
- Related to this point, seeking out websites on a topic can only be as good as the keywords that are employed in the search process. The researcher has to be very patient to try as many relevant keywords as possible (and combinations of them—known as Boolean searches) and may be advised to ask other people (librarians, supervisors, and so on) whether the most appropriate ones are being used.

- New websites are continually appearing and others disappearing. Researchers basing their investigations on websites need to recognize that their analyses may be based on websites that no longer exist and that new ones may have appeared since data collection was terminated.
- Websites are also continually changing, so that an analysis may be based upon at least some websites that have been quite considerably updated. Thus, while the constabularies in Sillince and Brown's (2009) investigation still have websites, the specific content of those websites that were used in their study is no longer available and is likely to be significantly different from the content that can be obtained currently.
- The analysis of websites and web pages is a new field that is very much in flux. New approaches are being developed at a rapid rate. Some draw on ways of interpreting documents that were covered in Chapters 22 and 23, such as discourse analysis and qualitative content analysis. Others have been developed specifically in relation to the Web, such as the examination of hyperlinks between websites and their significance (Schneider and Foot 2004).

It was noted in Chapters 19 and 23 that there has been a growing interest in visual materials. The use of images in websites is also potentially interesting. Crook and Light (2002) analysed the photographs in ten university prospectuses. The authors note that the images that accompany departmental entries often include photographs of students apparently studying but that they are rarely shown in the archetypal formal contexts of university learning, such as lectures or private study. Instead, they are usually shown in 'social' forms of learning, where they are also active, engaged, and frequently out of doors. The authors argue that these less typical learning contexts are chosen because of their capacity to connect with familiar routines for many applicants.

Most researchers who use documents as the basis for their work have to confront the issue that it is difficult to determine the universe or population from which they are sampling. Therefore, the problems identified here and in Chapter 23 are not unique to websites. However, the rapid growth and speed of change in the Web accentuate these kinds of problems for social researchers, who are likely to feel that the experience is like trying to hit a target that not only continually moves but is in a constant state of metamorphosis. The crucial issue is to be sensitive to the limitations of the use of websites as material that can be analysed, as well as to the opportunities they offer.



Research in focus 28.1

Conducting a content analysis of websites

The reporting of organizations' environmental performance has become increasingly significant as concerns about our ecology and environment have grown. Jose and Lee (2007: 309) conducted a content analysis of the websites of the world's 200 largest corporations to examine the

content of corporate environmental disclosures with respect to the following seven areas: environmental planning considerations, top management support to the institutionalization of environmental concerns, environmental structures and organizing specifics, environmental leadership activities, environmental control, external validations of certifications of environmental programs, and forms of corporate disclosures.

In fact, only 140 companies' websites could be analysed mainly due to the absence of relevant statements. Environmental statements were coded in terms of the presence of the various indicators the researchers developed. One set of findings related to the philosophical underpinnings of the statements. Here, there are three interesting findings. First, 64% of the 140 companies depict environmental performance in terms of sustainable development. Secondly, 58% take an 'integrated management' approach whereby issues of environmental performance are suffused through the organization's structures and processes. Thirdly, only 40% adopt a life-cycle approach in which products are deemed to be a company's responsibility from initial inception to the point where it is terminally expended. Overall, one of the key findings is that the evidence suggests that the growing focus on environmental responsibility is not totally driven by regulation; in other words, at least so far as their public statements are concerned, companies are going beyond their countries' regulatory frameworks.



Tips and skills

Referring to websites

There is a growing practice in academic work that, when referring to websites, you should include the date you consulted them. This convention is very much associated with the fact that websites often disappear and frequently change, so that, if subsequent researchers want to follow up your findings, or even to check on them, they may find that they are no longer there or that they have changed. Citing the date you accessed the website may help to relieve any anxieties about someone not finding a website you have referred to or finding it has changed. This does mean, however, that you will have to keep a running record of the dates you accessed the websites to which you refer.

In addition, it is important to bear in mind the four quality criteria recommended by J. Scott (1990) in connection with documents (see Chapter 23). Scott's suggestions invite us to consider quite why a website is constructed. Why is it there at all? Is it there for commercial reasons? Does it have an axe to grind? In other words, we should be no less sceptical about websites than about any other kind of document.

One further point to register is that, just like most documents, websites can be subjected to both qualitative

and quantitative forms of analysis. The study by Sillince and Brown (2009) involves a qualitative approach to the analysis of content, but quantitative content analysis of the kind covered in Chapter 13 is also feasible (see Research in focus 28.1).

There is yet another kind of material that can be found on the Web that could be construed as a form of document—the postings that are made to discussion forums, chatroom interactions, and other kinds of contributions to online environments. Collectively, these are

often referred to as studies of online interaction and sometimes, when it is appropriate, as studies of online communities. An example can be found in Research in focus 28.2. Such data might be gleaned in real time, in which case they are closer to a form of observation, or they may be archived interactions, in which case they are forms of document. When the documents are postings to online discussion groups, as in Research in focus 28.2 (see also Research in focus 28.3), some further considerations come into play. Sometimes these contexts may be ones in which the researcher simply reads and analyses the various postings without any participation. This can often lead to accusations of 'lurking', where the researcher simply reads without

participation and without announcing his or her presence and is sometimes regarded as being ethically dubious. On other occasions, the researcher may be a participant and in such circumstances the research is much closer to the notion of what is variously called virtual or online ethnography. These considerations demonstrate that the analysis of online documents and virtual/online ethnography easily shade into each other. Yet another kind of document that has been subjected to analysis is the blog (Web log). For example, Huffaker and Calvert (2005) conducted a traditional quantitative content analysis of blogs written by US teenagers to examine gender differences in language use and the representation of identity.



Research in focus 28.2

Conducting a thematic analysis of online discussion postings

Postings on websites have been a fertile source of data for many researchers. Sullivan (2003) analysed postings to two online US listservs that offered online support to cancer sufferers. One group offered support for ovarian cancer and the other for prostate cancer. The point about the choice of these two groups is that their respective diseases are gender-specific and therefore the researcher was able to explore gender differences in support. The postings were submitted to a thematic analysis (see Chapter 24). Differences between the two sets of postings were discerned. The postings to the prostate cancer support group tended to be of a technical nature, focusing a great deal on information giving and requesting. For example, one patient wrote:

Around the 11th week of estramustine (Emcyt) (+ vinblastine) I had my first bona fide side effect (apart from some fatigue and muscle cramping): my nipples have enlarged, and possibly the breasts a bit, although I may just be focusing on existing fat. Does anyone with experience know if they continue to enlarge (obviously not forever) and if the sensitivity (some, not great) increases or just stays constant? (quoted in Sullivan 2003: 94)

The ovarian cancer postings were more likely to deal with personal experiences and comments, such as:

those feelings sound SOOOO familiar that I had to gulp hard reading your post—it came very close to home. There were times when I felt that way even though I was finished with chemo and not facing a recurrence that I knew of! (quoted in Sullivan 2003: 89)

The examination of postings to chatrooms and discussion forums has become a particularly fertile data source for social scientists with interests in health and health-related issues (examples can be found in Research in focus 13.3, 28.2, and 28.4). As Seale et al. (2010) argue (see the second study in Research in focus 13.3), the rationale for their use is compelling because they provide access to the immediacy of the experience of illness and

are 'given' data and as such are not influenced by an interviewer and they obviate the need for a full interview-based study. However, they also observe that there are some problems with a reliance on such postings: access to and facility with the Internet is highly variable; those who submit postings may differ in significant ways from those who do not (quite aside from the issue of access to and facility with the Internet); the researcher cannot probe

the individuals concerned; and only a limited number of research questions can be answered with the materials

provided by postings, whereas qualitative interviews can be tailored to answer a host of different kinds of question.



Using the Internet to collect data from individuals

In this section I examine research methods that entail the use of either the Web or online communications, such as email, as a platform for collecting data from individuals. At the time of writing, the bulk of the discussion concerned with this issue has emphasized four main areas:

1. online ethnography or the ethnography of the Internet;
2. qualitative research using online focus groups;
3. qualitative research using online personal interviews;
4. online social surveys.

These types of Internet-based research method do not exhaust the full range of possibilities but they do represent recurring emphases in the emerging literature on this subject. All of them offer certain advantages over their traditional counterparts because:

- they are usually more economical in terms of time and money;
- they can reach large numbers of people very easily;
- distance is no problem, since the research participant need be accessible only by computer—it does not matter if he or she is in the same building or across the world;
- data can be collected and collated very quickly.

The chief general disadvantages tend to revolve around the following issues:

- Access to the Internet is still nowhere near universal, so that certain people are likely to be inaccessible. Remote regions are still sometimes excluded from broadband access, and, even when it is accessible, bandwidth varies considerably, with consequent implications for download speeds.
- People still vary considerably in their facility with computers, which can have implications for preparedness to be involved in research and the ease with which people can be research participants.
- Invitations to take part in research may be viewed as just another nuisance email.

- There is loss of the personal touch, owing to lack of rapport between interviewer and interviewee, including the inability to pick up visual or auditory cues.
- There are concerns among research participants about confidentiality of replies at a time of widespread anxiety about fraud and hackers.

More specific balance sheets of advantages and disadvantages relating to some of the individual e-research methods will be covered below.

There are two crucial distinctions that should be borne in mind when examining Internet-based research methods.

1. There is a distinction between *Web-based* and *communication-based* methods. The former is a research method whereby data are collected through the Web—for example, a questionnaire that forms a web page and that the respondent then completes. A communication-based research method is one where email or a similar communication medium is the platform from which the data collection instrument is launched.
2. There is a distinction between *synchronous* and *asynchronous* methods of data collection. The former occur in real time. An example would be an interview in which an online interviewer asks a question and the respondent, who is also online, replies immediately, as in a chatroom. An asynchronous method is not in real time, so that there is no immediate response from the respondent, who is unlikely to be online at the same time as the interviewer (or, if the respondent is online, he or she is extremely unlikely to be in a position to reply immediately). An example would be an interview question posed by the interviewer in an email that is opened and answered by the respondent some time later, perhaps days or weeks later.

With these distinctions in mind, we can now move on to examine the four main forms of online research methods previously identified.



Online ethnography

Ethnography may not seem to be an obvious method for collecting data on Internet use. The image of the ethnographer is that of someone who visits communities and organizations. The Internet seems to go against the grain of ethnography, in that it seems a decidedly placeless space. In fact, as Hine (2000) has observed, conceiving of the Internet as a place—a cyberspace—has been one strategy for an ethnographic study of the Internet, and from this it is just a short journey to the examination of communities in the form of online communities or virtual communities. In this way, our concepts of place and space that are constitutive of the way in which we operate in the real world are grafted onto the Internet and its use. A further issue is that, as noted in Chapter 19, ethnography entails participant observation, but in cyberspace what is the ethnographer observing and in what is he or she participating?

Markham's (1998) approach to an ethnography of life on the Internet involved interviews. The interviews followed a period of 'lurking' (reading but not participating) in computer-mediated communication forums like chatrooms and multi-user domains (MUDS). The interviews allowed synchronous questioning and answering; in other words, the asking and answering of questions were in real time, rather than the kind of questioning and answering that might occur via email, where a question might be answered several hours or days later. She used an interview guide, and the interviews lasted between one hour and over four hours. Such interviews are a very real challenge for both interviewer and interviewee, because neither party can pick up on visual cues (for example, puzzlement, anxiety) or auditory cues (sighs, groans).

One of Markham's interests lay in the reality or otherwise of online experiences. This can be seen in the following brief online interview sequence (Markham is Annette):

Annette 'How real are your experiences in the Internet?'

Sherie 'How real are experiences off the Internet?' (Markham 1998: 115)

In fact, Markham notes how her notion of 'real' was different from that of her interviewees. For Markham, 'real' or 'in real life' carried a connotation of genuineness or authenticity, but for her interviewees it was more to do with distinguishing experiences that occur offline. Indeed, Markham increasingly felt that her interviewees were questioning the validity of the dichotomous distinction between the real and the non-real, so far as online interaction was concerned. However, it is likely that these distinctions between life online and life offline will become less significant as younger people who are growing up with the Internet conduct large portions of their lives online. This development would have considerable implications for social researchers, since for many research participants the online world may become very naturalistic.

An interesting question about this research is: in what sense is it an ethnography? At one level, Markham was simply an interviewer who used a semi-structured interview guide to elicit information and the worldview of her correspondents. At another level, she was indeed a participant in and observer of life online, although the life that she was participating in and observing was very much a product of her promptings, no matter how open the questions she asked were and no matter how willing she was to allow her interviewees leeway in what they wanted to discuss. In much the same way that her interviewees were questioning the nature of reality, Markham's investigation invites us to question the nature of ethnography so far as research on the Internet is concerned.

Kendall (1999) was probably closer to the traditional concept of the ethnographer in that she describes her research as comprising three years of online participant observation in a MUD, as well as face-to-face interviews and attendance at face-to-face gatherings. Such research is probably closer to the conventional notion of ethnographic research in its use of several methods of data collection and a sense of participation in the lives of those being studied, as well as interviewing them.

In more recent years, Internet-based ethnographies have increasingly come to focus on online communities. Examples can be found in Research in focus 28.3 and 28.4.



Research in focus 28.3

Participant observation in cyberspace

J. P. Williams (2006) conducted participant observation research into straightedge, a youth subculture that emerged out of punk and that is associated with a lifestyle that is largely free of drugs, alcohol, and promiscuous sex and is committed to a vegetarian and often vegan diet. It is also associated with distinctive music that is heavily influenced by punk music. Williams notes that, since the emergence of the Internet, straightedge adherents have emerged who exhibit only limited participation in local music scenes and, he suggests, who might not otherwise have been adherents at all. Williams was interested in the struggle in online discussions to present an authentic straightedge identity in the face of these two major and different patterns of adherence. To this end, he focused his attention on an online straightedge discussion forum, which, he suggests, has the characteristics of an online community. There were two phases to this ethnography. In the first, he read forum threads without contributing to them. The first message of each thread was analysed using ethnographic content analysis. As a result of this work, he became increasingly aware of a conflict among contributors over what was an authentic straightedge self. He used the themes that emerged from this analysis to inform the second phase of the research in which, over a period of two years, he initiated discussions within the forum. He writes:

I started threads that asked participants about their affiliation with straightedge, their understandings of subcultural rules, their opinions about mainstream culture, and so on. By monitoring the threads daily, I could guide conversations, bring them back on track when participants strayed off topic, and ask follow-up questions based on initial responses. (J. P. Williams 2006: 181)

Prior to doing this, he had announced himself as a researcher who was analysing textual conversations. In addition, Williams conducted online synchronous interviews with nine key informants who were purposively sampled by virtue of the nature of their participation, with the website administrator, with several individuals who were regular contributors, and with some who were frequent contributors who then quit. Through this research, Williams was able to show that the online forums have had a significant impact on the straightedge community and how its adherents position themselves in terms of a sense of identity.



Research in focus 28.4

Covert participant observation in cyberspace

Brotsky and Giles (2007) report some findings and experiences relating to the first author's covert participation study of the 'pro-ana' community—in essence a community of people who are supportive of eating disorders such as and most notably anorexia nervosa. She identified twelve pro-ana websites and obtained membership of the various discussion contexts each website hosted—forums, email discussion lists, chatrooms, and so on. Brotsky fabricated a plausible persona in terms of age, sex, height, eating disorder (anorexia), and weight (current, past, and intended). The authors write that Brotsky

began by introducing herself as an authentic pro-ana sympathizer who was hoping to establish virtual relationships with like-minded individuals, and continued to participate as naturally as possible across the course of the investigation. As the investigation unfolded, connections were made and close relationships developed through ongoing conversations with participants. . . . [She] successfully acquired membership of 23 separate groups across 12 websites, including discussion forums, chatrooms, blog sub-communities, online journal/diary sites, and e-mail-group affiliations. (Brotsky and Giles 2007: 98)

Through this study, the authors were able to identify the sources of support offered within the communities and group identities (such as whether anorexia was viewed as a lifestyle or illness).

The methods and sources of data associated with online ethnography are sometimes used as adjuncts to conventional ethnographies of communities. For example, in his study of goths, which was referred to in Chapter 19, Hodkinson (2002, 2005) participated in some online discussion groups. Interestingly, his participation in these cybercontexts was in some ways more problematic than in the face-to-face ones because his markers of goth appearance could not be deployed in the more remote environment of the Internet. He had to become thoroughly acquainted with the conventions of online communication within the goth community and to develop ways of conveying his membership without the external markers associated with his appearance. The use of photographs of himself and meeting some subscribers helped to establish his credibility.

Hine describes her approach as one of 'virtual ethnography' (see Research in focus 28.5), which has a deliberate dual meaning: it is at once an ethnography of being

online—that is, of the virtual—but also a virtual ethnography—that is, not quite an ethnography in the sense of the term's conventional settings. In particular, a virtual ethnography requires getting away from the idea that an ethnography is of or in a place in any traditional sense. It is also an ethnography of a domain that infiltrates other spaces and times of its participants, so that its boundedness is problematic to participants and analysts alike. As regards the issue of the interpretative flexibility of the Internet, Hine shows that there was some general agreement about its purposes as a technology. However, these purposes were not inscribed in the technology in the way that a technological determinist position might imply, but they had arisen in the course of the use of the Internet. Moreover, Hine argues that the nature and capacities of the Internet have not become totally stabilized in the minds of participants and that gradual increments of change are likely in response to particular needs and purposes of participants.



Research in focus 28.5

Virtually an ethnography

Hine's (2000) research was concerned with the trial in 1997 in Boston of a British nanny (Louise Woodward) for the murder of the child in her charge, as well as the aftermath of the trial. Hine's data-collection strategy included: searching out websites concerned with the case, which attracted a great deal of Internet interest; contacting Web authors by email and asking a series of questions about their intentions, familiarity with the Web, experiences, and so on; examining communication in newsgroups in which ten or more postings about the case had been made and posting a message in those groups; and contact with the official site that campaigned for Louise Woodward. In contacting Web developers and newsgroup participants, Hine writes:

I introduced myself as a researcher in communications who was looking at the specific case of Louise Woodward on the Internet. I explained that I was concerned with how people got interested in the case, where they got their information from, and what they thought of the quality of information on newsgroups and web pages. . . . I offered people a promise of confidentiality and the chance to check my own credentials through my web site. (2000: 78)

Hine did not receive a very good response to the newsgroup postings, which may reflect a tendency noticed by other researchers for newsgroup, MUD, listserv, and other participants to be sceptical about the use of their cyberdomains for research and suspicious about researchers who contact them. In her examination of newsgroup communication, Hine employed an approach that was heavily influenced by discourse analysis (see Chapter 22)—for example, by showing the discursive moves through which participants sought to construe the authenticity or factual nature of their information.

Studies like these are clearly inviting us to consider the nature of the Internet as a domain for investigation, but they also invite us to consider the nature and the adaptability of our research methods. In the examples discussed in this section, the question of what is and is not ethnography is given a layer of complexity that adds to the considerations about this issue that were referred to in Chapter 19. But these studies are also cases of using Internet-based research methods to investigate Internet use. Future online ethnographic investigations of issues unrelated to the Internet will give a clearer indication of the possibilities that the method offers. At the same time, both Hine (2008) and Garcia et al. (2009) have observed that there is a growing tendency and need for online ethnographers to take into account offline worlds, because even the most committed Internet-user has a life beyond the computer. This development means taking into account how the members of the online communities that tend to be the focus of ethnographic studies have lives offline and that the two will have implications for the other. There is a corollary to this observation that, as the Internet becomes increasingly embedded in people's lives, practitioners of what might be thought of as conventional ethnography (in the sense of the ethnographic study of non-virtual lives and communities) will increasingly have to take into account individuals' commitments to life on the Internet. Earlier online ethnographies tended to emphasize people's involvement and participation in online worlds to the relative exclusion of offline worlds, perhaps because the relative newness of the Internet and its lack of reach into everyday life during those days meant that the virtual could be treated as a relatively autonomous domain.

As noted previously, there has been considerable debate in recent years regarding the status of 'lurking' in online ethnography. This practice is disliked by members of online communities and can result in censure from participants who are often able to detect the practice. It has also been suggested that a sole reliance on lurking without participation risks omitting crucial experiential aspects of the understanding of online communities (Hine 2008). At the same time, online ethnographers sometimes lurk as a prelude to their fieldwork in order to gain an understanding of the setting prior to their participation. Even when ethnographers lurk in this way, ethical issues arise (see below), while it has been suggested that 'ethnographers will get a more authentic experience of

an online setting if they jump straight into participation' (Garcia et al. 2009: 60). As noted above, the examination of Internet documents like postings to discussion groups and ethnographic studies, which often involve considerable scrutiny of these very kinds of documents, frequently shade into each other. In many ways, it is the presence or absence of participation that may be used to distinguish a purely documentary qualitative analysis (such as a thematic analysis of postings without participation, as in Research in focus 28.2) from a virtual or online ethnographic study (such as a thematic analysis of postings with participation, as in Research in focus 28.4). In the case of the study reported in Research in focus 28.3, the researcher moved from a purely documentary analysis in the first phase to an online ethnography in the second.

Thinking deeply 28.1 outlines four main types of online interaction study. It is likely that which of the four types of online interaction study is employed is not entirely a matter of choice. For example, hostility to outsiders and in particular researchers may make a researcher inclined to lurk or to participate covertly, as suggested by Brotsky and Giles (2007; see Research in focus 28.4). Another possibility is that the nature of the community being studied may have implications for the approach taken. For example, Kozinets (2010) draws a distinction between online ethnographies of online communities and ethnographies of communities online. The former involve the study of communities that have a largely online existence, such as his research on online discussion forums of knowledgeable coffee enthusiasts (Kozinets 2002). The ethnographic study of communities online entails research into communities that have a predominantly offline existence. An example is his study of *Star Trek* fans, for which he became a very active member of fan clubs, attended conventions, and (for the online component) examined newsgroup postings and Web pages, and engaged in email exchanges (Kozinets 2001). The relevance of this distinction is that Type 4 studies are feasible only in connection with the study of communities online that have a clear offline presence. The study of communities has been a major feature of online ethnography. Hine's (2000; see Research in focus 28.5) early virtual ethnography is in that context unusual (though by no means alone) in that it focuses on an event rather than a distinct community or culture.



Thinking deeply 28.1

Four types of online interaction study

As noted in the main text, the study of online interaction has been a particularly prominent area for qualitative researchers. This usually entails the examination of online discussion groups, such as online support groups and discussion boards. As also noted in the main text, the study of such documents and online ethnography can shade into each other with this kind of research. There are four prominent types of online interaction study employed by qualitative researchers. All four types entail a considerable degree of immersion in the postings, but Type 1 is the least likely of the four to be viewed as a form of online ethnography, as the researcher largely occupies a position as external observer.

Type 1. Study of online interaction only with no participation

Studies that typically entail solely the examination of blogs, discussion groups, listservs, etc., without any participation or intervention on the part of the researcher(s). Typically, it takes the form of 'lurking' and conducting an analysis without the authors of the materials being aware of the researcher's(s') presence.

Examples: C. F. Sullivan (2003; Research in focus 28.2); Sanders (2005).

Type 2. Study of online interaction only with some participation

Studies that typically entail the examination of blogs, discussion groups, listservs, etc., but with some participation or intervention on the part of researcher(s). The researcher is not passive and instead intervenes (overtly or covertly) in the ongoing Internet-mediated postings and discussions.

Examples: Kozinets (2002); Brotsky and Giles (2007; Research in focus 28.4).

Type 3. Study of online interaction plus online or offline interviews

Same as Type 2, but in addition the researcher interviews some of the people involved in the online interaction. The interviews may be online or offline.

Examples: Kanayama (2003); J. P. Williams (2006; see Research in focus 28.3).

Type 4. Study of online interaction plus offline research methods (in addition to online or offline interviews)

Same as Type 3, but in addition there is active participation of the researcher(s) in the offline worlds of those being studied, such as attending gatherings, as well as interviews (which may be online or offline).

Examples: Kendall (1999); Kozinets (2001).



Qualitative research using online focus groups

There is a crucial distinction between **synchronous** and **asynchronous online focus groups**. With the former, the focus group is in real time, so that contributions are made more or less immediately after previous contributions (whether from the moderator or from other participants) among a group of participants, all of whom are simultaneously online. Contributions can be responded to as soon as they are typed (and with some forms of software, the contributions can be seen as they are being typed). As Mann and Stewart (2000) observe, because several participants can type in a response to a contribution at the same time, the conventions of normal turn-taking in conversations are largely sidelined.

With asynchronous groups, focus group exchanges are not in real time. Email is one form of asynchronous communication that is sometimes used (see Research in focus 28.6 for an example). For example, the moderator might ask a question and then send the email containing it to focus group participants. The latter will be able to reply to the moderator and to other group members at some time in the future. Such groups get around the time zone problem and are probably easier than synchronous groups for participants who are not skilled at using the keyboard.



Research in focus 28.6

An asynchronous focus group study

Adriaenssens and Cadman (1999) report their experiences of conducting a market research exercise to explore the launch of an online share-trading platform in the UK. Participants were in two groups: one group of active shareholders (twenty participants) and a second group of passive shareholders (ten participants). They were identified through the MORI Financial Services database as 'upmarket shareholders who were also Internet users' (1999: 418–19). The participants who were identified were very geographically spread, so online focus groups were ideal. Questions were emailed to participants in five phases with a deadline for returning replies, which were then copied anonymously to the rest of the participants. The questions were sent in the body of the email, rather than as attachments, to solve problems of software incompatibility. After each phase, a summary document was produced and circulated to participants for comment, thus injecting a form of respondent validation into the project. The researchers found it difficult to ensure that participants kept to the deadlines, which in fact were rather tight, although it was felt that having a schedule of deadlines that was kept to as far as possible was helpful in preventing drop-outs. The researchers felt that the group of active shareholders was too large to manage and suggest groups of no more than ten participants.

One of the advantages of both types of online focus groups stems from the possibility of using a 'captive population' of people who are already communicating with each other, unlike face-to-face focus groups that are brought together for the purpose of the focus group meeting. This means researchers are often able to take advantage of pre-existing social groups of people who are already communicating with one another online (Stewart and Williams 2005). Online focus groups also enable geographical distances to be overcome. International focus groups can enable cross-cultural discussions at a relatively low cost. However, setting up a time and place for synchronous online focus group discussions between international participants may be problematic because of time zone differences, making it hard to find a time that is convenient to everyone (Stewart and Williams 2005).

Conferencing software is used for synchronous groups and is often used for asynchronous groups as well. This may mean that focus group participants will require access to the software, which can be undesirable if the software needs to be loaded onto their computers. Participants may not feel confident about loading the software, and there may be compatibility problems with particular machines and operating systems. Research in focus 28.7 provides an example of the use of this kind of software in an online focus group study.

Selecting participants for online focus groups is potentially difficult, not least because they must normally have access to the necessary hardware and software. One

possibility is to use questionnaires as a springboard for identifying possible participants, while another possibility is to contact them by email, this being a relatively quick and economical way of contacting a large number of possible participants. For their study of users of a parenting website, O'Connor and Madge (see Research in focus 28.7) secured their online focus group participants through a Web survey.

The requisite number of participants is affected by the question of whether the online focus group is being conducted synchronously or asynchronously. Mann and Stewart (2000) advocate that, with the former type, the group should not be too large, because it can make it difficult for some people to participate, possibly because of limited keyboard skills, and they recommend groups of between six and eight participants. Also, moderating the session can be more difficult with a large number. In asynchronous mode, such problems do not exist, and very large groups can be accommodated—certainly much larger ones than could be envisaged in a face-to-face context, although Adriaenssens and Cadman (1999) suggest that large groups can present research management problems.

Before starting the focus group, moderators are advised to send out a welcome message introducing the research and laying out some of the ground rules for the ongoing discussion. There is evidence that participants respond more positively if the researchers reveal something about themselves (Curasi 2001). This can be done in the opening message or by creating links to personal websites.



Research in focus 28.7

A synchronous focus group study

O'Connor and Madge (2001, 2003; see also Madge and O'Connor 2002) employed conferencing software in connection with a virtual focus group study of the use of online information for parents. The research was specifically concerned with one UK parenting website (www.babyworld.co.uk (accessed 14 January 2011)). Initially, the researchers set up a **Web survey** (see later in the chapter for information about this technique) on the use of this website. When respondents sent in their questionnaire, they were thanked for their participation and asked to email the researchers if they were prepared to be interviewed in depth. Of the 155 respondents who returned questionnaires, 16 agreed to be interviewed. Interviewees were sent the software to install on their own machines. The researchers tried to ensure that each group was asked more or less the same questions, so the researchers worked in pairs whereby one cut and pasted questions into the discussion (or otherwise typed questions) and the other acted as a focus group moderator by thinking about the evolution of the discussion and about when and how to intervene. For each session, the researchers introduced themselves and asked participants to do likewise. In addition, they had placed descriptions and photographs of themselves on a website to which participants were directed. An important part of the process of building rapport was the fact that both of the researchers were mothers. One of the findings reported is that the greater anonymity afforded by the Internet gave participants greater confidence to ask embarrassing questions, a finding that has implications for online focus groups. This can be seen in the following extract:

Amy: I feel better askign BW [Babyworld] than my health visitor as they're not goign to see how bad I am at housekeeping!!!

Kerry: I feel the same. Like the HV [health visitor] is judging even though she says she isn't

Kerry: Although my HV has been a life line as I suffer from PND [post natal depression]

Amy: Also, there are some things that are so little that you don't want to feel like you're wasting anyone's time. Askign the HV or GP might get in the way of something mreo important, whereas sending an email, the person can answer it when convenient

Amy: My HV is very good, but her voice does sound patronising. I'msure she doesn't mean it, but it does get to me . . .

Kerry: Being anon means that you don't get embarassed asking about a little point or something personal (O'Connor and Madge 2001: 10.4)

It is striking that this brief extract reveals a good flow without intervention by the researchers. It contains several misspellings and mistakes (for example, 'I'msure'), but these are retained to preserve the reality of the interaction. The researchers did not have to transcribe the material because it was already in textual form. Also, the fact that participants appear to relish the anonymity of the Internet as a source of information has implications for online focus groups, because it may be that participants find it easier to ask naive questions or to make potentially embarrassing comments than in face-to-face focus groups.

One problem with the asynchronous focus group is that moderators cannot be available online twenty-four hours a day, although it is not inconceivable that moderators could have a shift system to deal with this limitation. This lack of continuous availability means that emails or postings may be sent and responded to without any ability of the moderator to intervene or participate. This feature may not be a problem, but could become

so if offensive messages were being sent or if it meant that the discussion was going off at a complete tangent from which it would be difficult to redeem the situation. Further, because focus group sessions in asynchronous mode may go on for a long time, perhaps for several days or even weeks, there is a greater likelihood of participants dropping out of the study. A further problem arises from response rates, which may be lower than for

face-to-face focus groups (Stewart and Williams 2005). Even though it is relatively easy for the researcher to contact a large number of possible respondents using email, the response rates of those wishing to participate in an online focus group has been found to be quite low (between 5 and 20 per cent). Further reservations have been expressed about the lack of non-verbal data obtained from online focus groups, such as facial expression. Underhill and Olmstead (2003) compared data from synchronous online focus groups with parallel data from conventional face-to-face ones and found little difference in terms of data quantity or quality.

Online focus groups are unlikely to replace their face-to-face counterparts. Instead, they are likely to be

employed in connection with certain kinds of research topic and/or sample. As regards the latter, dispersed or inaccessible people are especially relevant to online focus group research. As Sweet (2001) points out, relevant topics are likely to be ones involving sensitive issues and ones concerned with Internet use—for example, the studies discussed in Research in focus 28.6 and 28.7.

In Tips and skills ‘Advantages and disadvantages of online focus groups and personal interviews compared to face-to-face interviews in qualitative research’ the discussion of online focus groups is combined with a discussion of online personal interviews, which are the subject of the next section, since most of the elements in the balance sheet of advantages and disadvantages are the same.



Tips and skills

Advantages and disadvantages of online focus groups and personal interviews compared to face-to-face interviews in qualitative research

Here is a summary of the main advantages and disadvantages of online focus groups and personal interviews compared to their face-to-face counterparts. The two methods are combined because the tally of advantages and disadvantages applies more or less equally well to both of them.

Advantages

- Online interviews and focus groups are extremely cheap to conduct compared to comparable face-to-face equivalents. They are likely to take longer, however, especially when conducted asynchronously.
- Interviewees or focus group participants who would otherwise normally be inaccessible (for example, because they are located in another country) or hard to involve in research (for example, very senior executives, people with almost no time for participation) can more easily be involved.
- Large numbers of possible online focus group participants can be contacted by email.
- Interviewees and focus group participants are able to reread what they (and, in the case of focus groups, others) have previously written in their replies.
- People participating in the research may be better able to fit the interviews into their own time.
- People participating in the research do not have to make additional allowances for the time spent travelling to a focus group session.
- The interviews do not have to be audio-recorded, thus eliminating interviewee apprehension about speaking and being recorded.
- There is no need for transcription. This represents an enormous advantage because of time and cost involved in getting recorded interview sessions transcribed.
- As a result of the previous point, the interview transcripts can be more or less immediately entered into a computer-assisted qualitative data analysis software (CAQDAS) program of the kind introduced in Chapter 25.

- The transcripts of the interviews are more likely to be accurate, because the problems that may arise from mishearing or not hearing at all what is said do not arise. This is a particular advantage with focus group discussions, because it can be difficult to establish who is speaking and impossible to distinguish what is said when participants speak at the same time.
- Focus group participants can employ pseudonyms so that their identity can be more easily concealed from others in the group. This can make it easier for participants to discuss potentially embarrassing issues or to divulge potentially unpopular views. The ability to discuss sensitive issues generally may be greater in electronic than face-to-face focus groups and individual interviews.
- In focus groups, shy or quiet participants may find it easier to come to the fore.
- Equally, in focus groups overbearing participants are less likely to predominate, but in synchronous groups variations in keyboard skills may militate slightly against equal participation.
- Participants are less likely to be influenced by characteristics like the age, ethnicity, or appearance (and possibly even gender if pseudonyms are used) of other participants in a focus group.
- Similarly, interviewees and focus group participants are much less likely to be affected by characteristics of interviewers or moderators respectively, so that interviewer bias is less likely.
- When interviewees and participants are online at home, they are essentially being provided with an 'anonymous, safe and non-threatening environment' (O'Connor and Madge 2001: 11.2), which may be especially helpful to vulnerable groups.
- Similarly, researchers are not confronted with the potentially discomfiting experience of having to invade other people's homes or workplaces, which can themselves sometimes be unsafe environments.

Disadvantages

- Only people with access to online facilities and/or who find them relatively straightforward are likely to be in a position to participate.
- It can be more difficult for the interviewer to establish rapport and to engage with interviewees. However, when the topic is of interest to participants, this may not be a great problem.
- It can be difficult in asynchronous interviews to retain over a longer term any rapport that has been built up.
- Probing is more difficult though not impossible. Curasi (2001) reports some success in eliciting further information from respondents, but it is easier for interviewees to ignore or forget about the requests for further information or for expansion on answers given.
- Asynchronous interviews may take a very long time to complete, depending on cooperativeness.
- With asynchronous interviews, there may be a greater tendency for interviewees to discontinue their participation than is likely to be the case with face-to-face interviews.
- There is less spontaneity of response, since interviewees can reflect on their answers to a much greater extent than is possible in a face-to-face situation. However, this can be construed as an advantage in some respects, since interviewees are likely to give more considered replies (though some commentators see the ability to provide more considered replies a disadvantage (see Adriaenssens and Cadman 1999)).
- There may be a tendency for refusal to participate to be higher in online personal interviews and from possible online focus group participants.
- The researcher cannot be certain that the people who are interviewed are who they say they are (though this issue may apply on occasion to face-to-face interviews as well).
- Turn-taking conventions between interviewer and interviewee are more likely to be disrupted.
- In synchronous focus groups, variations in keyboard skills may make equal levels of participation difficult.
- Online interviews and focus groups from home require considerable commitment from interviewees and participants if they have to install software onto their computers and remain online for extended periods of time, thereby incurring expense (though it is possible to offer remuneration for such costs if they have a contract with an Internet Service Provider whereby their use of broadband is limited).

- The interviewer/moderator may not be aware that the interviewee/participant is distracted by something and in such circumstances will continue to ask questions as if he or she had the person's full attention.
- Online connections may be lost, so research participants need to know what to do in case of such an eventuality.
- Interviewers cannot capitalize on body language or other forms of non-verbal data that might suggest puzzlement, or in the case of focus groups a thwarted desire to contribute to the discussion.

Sources: Clapper and Massey (1996); Adriaenssens and Cadman (1999); Tse (1999); Mann and Stewart (2000); Curasi (2001); O'Connor and Madge (2001); Sweet (2001); Davis et al. (2004); Evans et al. (2008); Hewson and Laurent (2008); www.geog.le.ac.uk/orm/interviews/inttypes.htm (accessed 10 December 2010).



Qualitative research using online personal interviews

The issues involved in conducting online personal interviews for qualitative research are essentially the same as those to do with conducting online focus groups. In particular, the researcher must decide whether the interviews should take place in synchronous or asynchronous mode. The factors involved in deciding which to use are also largely the same, although issues to do with variable typing speed or computer-related knowledge among focus group participants will not apply.

Although online interviews run the risk relative to face-to-face interviews that the respondent is somewhat more likely to drop out of the exchange (especially in asynchronous mode, since the interviews can sometimes be very protracted), Mann and Stewart (2000: 138–9) suggest that in fact a relationship of mutual trust can be built up. This kind of relationship can make it easier for a longer-term commitment to the interview to be maintained, but also makes it easier for the researcher to go back to his or her interviewees for further information or reflections, something that is difficult to do with the face-to-face personal interview. The authors also suggest that it is important for interviewers to keep sending messages to respondents to reassure them that their written utterances are helpful and significant, especially since interviewing through the Internet is still an unfamiliar experience for most people.

A further issue for the online personal interviewer to consider is whether to send all the questions at once or to interview on a question followed by reply basis. The problem with the former tactic is that respondents may read all the questions and then reply only to those that they feel interested in or to which they feel they can make

a genuine contribution, so that asking one question at a time is likely to be more reliable. Bampton and Cowton (2002) report their experiences of conducting email interviews by sending questions in small batches. They argue that this approach took pressure off interviewees to reply quickly, gave them the opportunity to provide considered replies (although the authors recognize that there may be a loss of spontaneity), and gave the interviewers greater opportunity to respond to interviewees' answers.

There is evidence that prospective interviewees are more likely to agree to participate if their agreement is solicited prior to sending them questions and if the researcher uses some form of self-disclosure, such as directing the person being contacted to the researcher's website, which contains personal information, particularly information that might be relevant to the research issue (Curasi 2001; O'Connor and Madge 2001). The argument for obtaining prior agreement from interviewees before sending them questions to be answered is that unsolicited emails, often referred to as 'spamming', are regarded as a nuisance among online users and receiving them can result in an immediate refusal to take the message seriously.

Curasi (2001) conducted a comparison in which twenty-four online interviews carried out through email correspondence (and therefore asynchronous) were contrasted with twenty-four parallel face-to-face interviews. The interviews were concerned with shopping on the Internet. She found the following:

- Face-to-face interviewers are better able than online interviewers to maintain rapport with respondents.

- Greater commitment and motivation are required for completing an online interview, but, because of this, replies are often more detailed and considered than with face-to-face interviews.
- Online interviewers are less able to have an impact on whether the interview is successful or not because they are more remote.
- Online interviewees' answers tend to be more considered and grammatically correct because they have more time to ponder their answers and because they can tidy them up before sending them. Whether this is a positive feature is debatable: there is the obvious advantage of a 'clean' transcript, but there may be some loss of spontaneity.
- Follow-up probes can be carried out in online interviews, as well as in face-to-face ones.

On the other hand, Curasi also found that the worst interviews in terms of the amount of detail forthcoming were from online interviews. It may be that this and the other differences are to do with the fact that, whereas a qualitative face-to-face interview is *spoken*, the parallel online interview is *typed*. The full significance of this difference in the nature of the respondent's mode of answering has not been fully appreciated.

It is very clear from many of the discussions about online interviews by email that a significant problem for many interviewers is that of keeping respondents involved in the interview when questions are being sent one or two at a time. Respondents tend to lose momentum or interest. However, Kivits (2005) has shown that recontacting interviewees on regular occasions and adopting an accessible and understanding style can not only help to maintain momentum for many interviewees but also bring some who have lost interest or forgotten to reply back into the research.

Some researchers have combined different types of interview in a single investigation. In addition to examining email and other forms of Internet-based communications for their study of online social support in the UK, Nettleton et al. (2002) interviewed fifty-one people involved in these communications. The interviewees were all approached by email after they had submitted relevant postings in the various lists that were being studied. In addition, some interviewees had responded to postings submitted by the research group. Some of these interviews were conducted face-to-face, some on

the telephone, and still others online. One of the online interviews was with a woman in her 60s with ME. She brings across the importance of online social support for someone with this condition:

The mailing list MECHAT . . . in particular has been a real lifeline. I check mail several times a day. I have been able to discuss things with people who understand . . . important as ME is an especially misunderstood illness . . . make new friends and share experiences and laughter . . . It is a real comfort if any trauma or upset occurs—death or illness of a loved one, relapse, relationship problems, or even just thoughtless remarks from folks who do not understand ME, which we would otherwise have to bear alone. (Nettleton et al. 2002: 183)

Evans, Elford, and Wiggins (2008) employed both face-to-face and synchronous online interviews in a study of gay men and HIV. They found that the online interviews lasted longer and produced considerably fewer words. They also found that there was considerably more variation in both interview length and number of words in the face-to-face context.

Thus far, most of the discussion of online personal interviewing assumes that the exchange is conducted entirely in a textual context. However, the webcam and Skype may offer further possibilities for synchronous online personal interviews. Such a development would make the online interview similar to a telephone interview, in that it is mediated by a technology, but also similar to an in-person interview, since those involved in the exchange would be able to see each other. However, one of the main advantages of the online interview would be lost, in that the respondent's answers would need to be transcribed, as in traditional qualitative interviewing.

The possibilities associated with conducting online focus groups has probably attracted greater attention than online personal interviews, perhaps because the potential advantages are greater with the former. For example, with online focus groups, a great deal of time and administration can be saved, whereas there is less comparable saving with online personal interviews unless a great deal of travel is involved.



Student experience

Using the Internet for supplementary data

Isabella Robbins wanted to interview mothers whose children had been vaccinated and those whose children had not been vaccinated. However, she found it difficult to find mothers in the latter group. This passage shows how she enlisted the Internet to help her to find supplementary data on mothers' decision-making in relation to the preference not to vaccinate their children, but it is also interesting and significant for her reliance on theoretical saturation (see Key concept 18.4).

Recruitment of mothers was fairly straightforward in terms of the mothers who said they had vaccinated. However, recruiting mothers who had not vaccinated proved to be problematic. Essentially, because childhood vaccination is a moral issue, these mothers were careful about who they talked to about their resistance. They were a hard to get at community. With time running out I decided to use Internet message boards—from women/mothers forums—in order to supplement my data. This data helped to confirm that I had reached saturation. No new themes came out from it, but it provided some additional rich data.



To read more about Isabella's research experiences, go to the Online Resource Centre that accompanies this book at: www.oxfordtextbooks.co.uk/orc/brymansrm4e/



Online social surveys

There has been a considerable growth in the number of surveys being administered online. It is questionable whether the research instruments should be regarded as structured interviews (see Chapter 9) or as self-completion questionnaires (see Chapter 10)—in a sense they are both. So far as online social surveys are concerned, there is a crucial distinction between surveys administered by email (email surveys) and surveys administered via the Web (Web surveys). In the case of the former, the questionnaire is sent via email to a respondent, whereas, with a Web survey, the respondent is directed to a website in order to answer a questionnaire. Sheehan and Hoy (1999) suggest that there has been a tendency for email surveys to be employed in relation to 'smaller, more homogeneous on-line user groups', whereas Web surveys have been used to study 'large groups of on-line users'.

Email surveys

It is important to distinguish between **embedded** and **attached email questionnaire surveys**. In the case of the embedded questionnaire, the questions are to be found in the body of the email. There may be an introduction to the questionnaire followed by some marking that partitions the introduction from the questionnaire itself.

Respondents have to indicate their replies using simple notations, such as an 'x', or they may be asked to delete alternatives that do not apply. If questions are open, they are asked to type in their answers. They then simply need to select the reply button to return their completed questionnaires to the researcher. With an attached questionnaire, the questionnaire arrives as an attachment to an email that introduces it. As with the embedded questionnaire, respondents must select and/or type their answers. To return the questionnaire, it must be attached to a reply email, although respondents may also be given the opportunity to fax or send the completed questionnaire by postal mail to the researcher (Sheehan and Hoy 1999).

The chief advantage of the embedded questionnaire is that it is easier for the respondent to return to the researcher and requires less computer expertise. Knowing how to read and then return an attachment requires a certain facility with handling online communication that is still not universally applicable. Also, the recipients' operating systems or software may present problems with reading attachments, while many respondents may refuse to open the attachment because of concerns about a virus. On the other hand, the limited formatting that is possible with most email software, such as using bold, variations in font size, indenting, and other features,

makes the appearance of embedded questionnaires rather dull and featureless, although this limitation is rapidly changing. Furthermore, it is slightly easier for the respondent to type material into an attachment that uses well-known software like Microsoft Word, since, if the questionnaire is embedded in an email, the alignment of questions and answers may be lost.

Dommeyer and Moriarty (2000) compared the two forms of email survey in connection with an attitude study. The attached questionnaire was given a much wider range of embellishments in terms of appearance than was possible with the embedded one. Before conducting the survey, undergraduate students were asked about the relative appearance of the two formats. The attached questionnaire was deemed to be better looking, easier to complete, clearer in appearance, and better organized. The two formats were then administered to two random samples of students, all of whom were active email-users. The researchers found a much higher response rate with the embedded than with the attached questionnaire (37 per cent versus 8 per cent), but there was little difference in terms of speed of response or whether questions were more likely to be omitted with one format rather than the other. Although Dommeyer and Moriarty (2000: 48) conclude that 'the attached e-mail survey presents too many obstacles to the potential respondent', it is important to appreciate that this study was conducted during what were still early days in the life of online surveys. It may be that, as prospective respondents become more adept at using online communication methods and as viruses become less of a threat (for example, as virus-checking software improves in terms of accessibility and cost), the concerns that led to the lower response rate for the attached questionnaire will be less pronounced. Also, the researchers do not appear to have established a prior contact with the students before sending out the questionnaires; it may be that the reaction to such an approach, which is frowned upon in the online community, may have been more negative in the case of the attached questionnaire format.

Web surveys

Web surveys operate by inviting prospective respondents to visit a website at which the questionnaire can be found and completed online. The Web survey has an important advantage over the email survey in that it can use a much wider variety of embellishments in terms of appearance (colour, formatting, response styles, and so on). Plate 28.1 presents part of the questionnaire from the gym survey from Chapter 15 in a Web survey format and

answered in the same way as in Tips and skills 'A completed and processed questionnaire' (see Chapter 15). With open questions, the respondent is invited to type directly into a boxed area (for example, question 2 in Plate 28.1).

However, the advantages of the Web survey are not just to do with appearance. The questionnaire can be designed so that, when there is a filter question (for example, 'if yes go to question 12, if no go to question 14'), it skips automatically to the next appropriate question. The questionnaire can also be programmed so that only one question ever appears on the screen or so that the respondent can scroll down and look at all questions in advance. Finally, respondents' answers can be automatically programmed to download into a database, thus eliminating the daunting coding of a large number of questionnaires. One of the chief problems with the Web survey is that, in order to produce the attractive text and all the other features, the researcher will either have to be highly sophisticated in the use of HTML or will need to use one of a growing number of software packages that are designed to produce questionnaires with all the features that have been described.

Plate 28.1 was created using Survey Monkey (www.surveymonkey.com/MySurveys.aspx (accessed 16 July 2010)). With commercial websites such as these, you can design your questionnaire online and then create a Web address to which respondents can be directed in order to complete it. The questions in Plate 28.1 were created using the software's basic features, which are free of charge. There is a fee for using this software if more advanced features are required. The fee will be affected by the number of respondents who complete the questionnaire and the length of time that the questionnaire is active. Each respondent's replies are logged, and the entire dataset can be retrieved once you decide the data-collection phase is complete. This means that there is no coding of replies (other than with open questions) and no need to enter data into your software. Not only does this save time; it also reduces the likelihood of errors in the processing of data.

Potential respondents need to be directed to the website containing the questionnaire. For example, in a study of attitudes towards immigrants, the researchers experimentally compared a Web and face-to-face interview survey (Heerwegh and Loosveldt 2008). The respondents were freshmen and women at the Katholieke Universiteit Leuven. They were emailed to request their participation in the Web survey and directed to the questionnaire. Two further emailings were conducted for those respondents who had not replied. Where there are possible problems to do with restricting who may answer the questionnaire,

Plate 28.1

Gym survey in Web survey format

1. Are you male or female?
☒ Male ☐ Female

2. How old are you?

3. Which of the following best describes your main reason for going to the gym? Please select one only

- ☐ Relaxation
- ☒ Maintain or improve fitness
- ☐ Lose weight
- ☐ Meet others
- ☐ Build strength
- ☐ Other (please specify)

4. When you go to the gym, how often do you use the cardiovascular equipment?

☒ Always ☐ Usually ☐ Rarely ☐ Never

5. When you go to the gym, how often do you use the weights machines (including free weights)?

☒ Always ☐ Usually ☐ Rarely ☐ Never

6. How frequently do you usually go the gym?

- ☐ Every day
- ☐ 4-6 days a week
- ☒ 2 or 3 days a week
- ☐ Once a week
- ☐ 2 or 3 times a month
- ☐ Once a month
- ☐ Less than once a month

it may be necessary to set up a password system to filter out people for whom the questionnaire is not appropriate.

Mixing modes of survey administration

The arrival of email-based and Web-based surveys raises the prospect of research in which either of these media for distributing questionnaires might be combined with other media, such as postal questionnaires or face-to-face or telephone structured interviews. Mixed modes of administering a survey raise the question of whether the mode of administration matters; in other words, do you get different results when you administer a questionnaire online from when you administer it offline (for example, by handing a questionnaire or mailing it to respondents)? Obviously, it would not be desirable to aggregate data from two different modes of administration if part of the variation in respondents' replies could be attributed to the way they received and completed the questionnaire. Equally, researchers using solely a Web-based questionnaire need to know how far their findings are different from conventional modes of administration.

Experiments with different modes of administration are quite reassuring on this point, because the differences may not always be large. A study of self-reported illicit drug use among a large sample of US university students found that there were similar findings when the results from Web- and paper-based questionnaire surveys were compared (McCabe 2004). The sample had been randomly assigned to either of the two modes of administration. Denscombe (2006) compared paper and Web-based modes of administration of nearly identical questionnaires administered to young people at an East Midlands school. The questionnaire was concerned with perceptions of social issues. One batch of questions, which is explored in Denscombe's article, dealt with views about smoking. The findings confirmed McCabe's study in suggesting that there is little evidence that the mode of administration makes a significant difference to the findings. There was a lower incidence of self-reported smoking among those using the Web-based questionnaire than those using the paper one. However, given the large number of items compared for a mode effect in Denscombe's study, it was likely that a small number

would be found to exhibit a mode effect, so it would be unwise to read too much into this particular finding.

In a study of American students' attitudes to various aspects of college experience, respondents were found to reply more positively when answering questions online than when completing paper questionnaires. However, with the exception of one of the scales, the differences were not large (Carini et al. 2003). Fleming and Bowden (2009) conducted a travel cost questionnaire survey by mail and the Web of visitors to Fraser Island, Australia. They found the results from the two modes of administration to be similar and that, in particular, the estimates of the 'consumer surplus' (the amount the tourist would be willing to spend on the visit less the amount actually spent) were similar between the two. In spite of the fact that there is some evidence of differences in response between modes of survey administration, mixing postal and online questionnaires is often recommended as a survey approach (Van Selm and Jankowski 2006). On the other hand, the previously mentioned Belgian study of attitudes towards immigrants experimentally compared a Web and face-to-face interview survey (Heerwegh and Loosveldt 2008). The researchers found that the Web respondents were more likely to answer with 'don't know' answers, less likely to differentiate on rating scales (this means they made less use of the full range of possible response options), and more likely to fail to reply to individual questions or items in rating scales. These findings suggest that, not only can the two modes produce different kinds of response, but that data quality may be poorer in the Web mode. A similar kind of study involving US teachers found few differences in failure to respond to individual items other than with what the authors call 'fill-in-the-blank' questions (Wolfe et al. 2008). An example of this kind of question in this survey was when teachers were asked to estimate the average number of

hours per week spent working on activities relating to teaching. With this kind of question, there was a much higher tendency towards non-response among Web respondents than among postal questionnaire ones.

Nonetheless, there is often a good case to be made for offering respondents an online option, but there is clearly a need to be aware of the limitations, such as possibly poorer data quality in Web surveys. A covering letter might draw prospective respondents' attention to a Web-based option along with the necessary instructions for accessing it, so that those who prefer to work online are not put off responding to the questionnaire. However, the researcher has to be sensitive to the possibility of mode effects.

Sampling issues

Anyone who has read Chapter 8 must be wondering how the sampling principles described there might apply to online surveys. A major issue and limitation is that not everyone in any nation is online and has the technical ability to handle questionnaires online in either email or Web formats. Certain other features of online communications make the issue more problematic.

- Many people have more than one email address.
- Many people use more than one Internet service provider (ISP).
- A household may have one computer but several users.
- Internet-users are a biased sample of the population, in that they tend to be better educated, wealthier, younger, and not representative in ethnic terms (Couper 2000).
- Few sampling frames exist of the general online population and most of these are likely to be expensive to acquire, since they are controlled by ISPs or may be confidential.



Tips and skills

Using Internet surveys to supplement traditional postal questionnaire surveys

There is a growing tendency for researchers who conduct postal questionnaire surveys to offer their respondents the opportunity to complete their questionnaires online (Couper 2000). This can be done by indicating in the covering letter that goes out with the postal questionnaire that they can have the questionnaire emailed to them, or, if the questionnaire is accessible via the Web, they can be directed to the Web address. The advantage of doing this is that some of the samples of respondents may feel more comfortable completing the questionnaire online because of the long periods of time they spend online and it removes the need to return the questionnaire by post. There is the question of whether or not the mode of administration (postal as against online) influences the kinds of response received. This is an issue that is likely to attract research in the future.

Such issues make the possibilities of conducting online surveys using probability sampling principles difficult to envisage. This is not to say that online surveys should not be considered. For social researchers who conduct research in organizations, the opportunities may be particularly good. For example, in many organizations, most if not all non-manual workers are likely to be online and to be familiar with the details of using email and the Internet. Thus surveys of samples of online populations can be conducted using essentially the same probability sampling procedures. Similarly, surveys of members of commercially relevant online groups can be conducted using these principles. C. B. Smith (1997) conducted a survey of Web presence providers (people or organizations that are involved in creating and maintaining Web content). She acquired her sample from a directory of providers, which acted as her sampling frame. A further

example of the use of a directory to generate a probability sample can be found in Research in focus 28.8. As Couper (2000: 485) notes of surveys of populations using probability sampling procedures:

Intra-organizational surveys and those directed at users of the Internet were among the first to adopt this new survey technology. These restricted populations typically have no coverage problems . . . or very high rates of coverage. Student surveys are a particular example of this approach that are growing in popularity.

Thus, certain kinds of populations are less adversely affected by coverage problems and therefore render probability sampling in Internet surveys less problematic.



Research in focus 28.8 Sampling for an online survey

Cobanoglu, Ward, and Moreo (2001) report the results of a study in which three different modes of survey administration were used: post, fax, and online. The questionnaires were administered to 300 hospitality professors in the USA, who had been randomly sampled from the online directory of the Council on Hotel, Restaurant, and Institutional Education. The sampling was carried out only from those who had an email address. The 300 professors were randomly assigned to one of the three modes of survey administration. The authors write:

For the web-based survey, an email message was sent to the professors along with a cover letter and the website address. The respondents were informed that they could request a paper copy of the survey should they have problems accessing the survey online. A unique website address was created for each respondent . . . (2001: 447)

Compared with the postal administration of the questionnaire, the online administration achieved a higher response rate (26 per cent versus 44 per cent) and a faster response speed, and was cheaper.

Hewson and Laurent (2008) suggest that, when there is no sampling frame, which is normally the case with samples to be drawn from the general population, the main approach taken to generating an appropriate sample is to post an invitation to answer a questionnaire on relevant newsgroup message boards, to suitable mailing lists or on web pages. The result will be a sample of entirely unknown representativeness, and it is impossible to know what the response rate to the questionnaire is, since the size of the population is also unknown. On the other hand, given that we have so little knowledge and

understanding of online behaviour and attitudes relating to online issues, it could reasonably be argued that some information about these areas is a lot better than none at all, provided the limitations of the findings in terms of their generalizability are appreciated.

A further issue in relation to sampling and sampling-related error is the matter of *non-response* (see Key concept 8.2). There is growing evidence that online surveys typically generate lower response rates than postal questionnaire surveys (Tse 1998; Sheehan 2001). A meta-analysis of forty-five experimental comparisons of Web

and other modes of survey administration (email surveys included in the 'other survey modes' group) found that the former achieved on average an 11 per cent lower response rate (Manfreda et al. 2008). Response rates can be boosted by following two simple strategies.

1. Contact prospective respondents before sending them a questionnaire. This is regarded as basic 'netiquette'.
2. As with postal questionnaire surveys, follow up non-respondents at least once.

The case for the first of these two strategies in boosting response rates is not entirely clear (Sheehan 2001), but seems to be generally advisable. However, as previously noted, with many online surveys it is impossible to calculate a response rate, since, when participants are recruited through invitations and postings on discussion boards, etc., the size of the population of which they are a sample is almost impossible to determine. One factor that may affect response rates is how far the topic is interesting or relevant to the sample members. Baumgartner and Morris (2010) achieved a respectable response rate of 37.9 per cent to a Web survey examining the influence of social networking sites as potential sources of news on students' engagement with the democratic process during the 2008 presidential campaign in the United States. Although the researchers found little evidence of social networking sites having an impact on political engagement, these sites play a significant role in young people's lives, and the fact that the survey was about them may have helped to give the survey a decent response rate.

Crawford et al. (2001) report the results of a survey of students at the University of Michigan that experimented with a number of possible influences on the response rate. Students in the sample were initially sent an email inviting them to visit the website, which allowed access, via a password, to the questionnaire. Some of those emailed were led to expect that the questionnaire would take 8–10 minutes to complete (in fact, it would take considerably longer); others were led to expect that it would take 20 minutes. As might be expected, those led to believe it would take longer were less likely to accept the invitation, resulting in a lower response rate for this group. However, Crawford et al. also found that those respondents who were led to believe that the questionnaire would take only 8–10 minutes were more likely to give up on the questionnaire part of the way through, resulting in unusable partially completed questionnaires in most cases. Interestingly, they also found that respondents were most likely to abandon their questionnaires part of the way through when in the middle of completing a series of open questions. The implications of this finding

echo the advice in Chapter 10 that it is probably best to ask as few open questions in self-completion questionnaires as possible.

Further evidence regarding this survey suggests that having a progress indicator with a Web survey can reduce the number of people who abandon the questionnaire part of the way through completion (Couper et al. 2001). A progress indicator is usually a diagrammatic representation of how far the respondent has progressed through the questionnaire at any particular point. Couper et al. also found that it took less time for respondents to complete related items (for example, a series of Likert items) when they appeared on a screen together than when they appeared singly. Respondents also seemed less inclined to omit related questions when they appeared together on a screen rather than singly.

However, it is important not to be too sanguine about some of these findings. One difficulty with them is that the samples derive from populations whose members are not as different from one another as would almost certainly be found in samples deriving from general populations. Another is that it must not be forgotten that, as previously noted, access to the Internet is still not universal, and there is evidence that those with Web access differ from those without both in terms of personal characteristics and attitudinally. Fricker et al. (2005) compared the administration of a questionnaire by Web survey and by telephone interview among a general US sample. They found that telephone interviewees were much more likely to complete the questionnaire (though it is possible if not probable that the same effect would have been noted if they had compared the Web mode with a self-completion mode). By contrast, telephone interviewees were more likely to omit questions by saying they had 'no opinion' than in the Web administration, probably because respondents were prompted to answer if they failed to answer a question. One difficulty noted by Fricker et al. is that Web respondents were more likely than telephone interviewees to give undifferentiated answers to series of questions like Likert items. In other words, they were more prone to response sets. Some of the questions were open questions inviting respondents to display their knowledge on certain issues. The researchers found that Web respondents took longer to answer the questions and were more likely to provide valid answers than the telephone interviewees. Couper (2008) summarized the results of several studies that compared the use of open questions in both Web and paper-based questionnaire surveys and found that the former were at least as good as the mail questionnaires in terms of both quantity and quality of answers. In fact,

in terms of the quantity written, the Web questionnaires were usually superior. More recently, Smyth et al. (2009) report that the quality of answers to open questions in Web surveys can be enhanced by: increasing the size of the space available for answers; drawing attention to the flexibility of the box into which answers are typed; and providing instructions that both clarify what is expected and motivate the respondent (such as pointing out the importance of their replies). A comparison of replies with an earlier equivalent paper-based questionnaire revealed that the quality of Web-based replies was superior in several different ways. Smyth et al. (2009) observe that, in recent years, the use of open questions in surveys has declined because of the high costs of administering them and the poor quality of replies, but that, with growing evidence of their potential through a Web-based mode of administration, they may enjoy a renaissance, especially when it is borne in mind that there is no need to transcribe people's sometimes illegible handwriting.

These findings suggest that it is difficult and probably impossible, given their relative newness, to provide a definitive verdict on Web surveys compared to traditional forms of survey administration. For one thing, it is difficult to separate out the particular formats that researchers use when experimenting with modes of administration from the modes themselves. It may be that, if they had displayed Web questions in a different manner, their findings would have been different—with obvious implications for how the Web survey fares when compared with any of the traditional forms. Further, Web surveys seem to work better than traditional survey forms in some respects but not in others.

Tips and skills 'Advantages and disadvantages of online surveys compared to postal questionnaire surveys' summarizes the main factors to take into account when comparing online surveys with postal questionnaire surveys, and Table 28.1 compares the different methods of administering a survey.



Tips and skills

Advantages and disadvantages of online surveys compared to postal questionnaire surveys

This box summarizes the main advantages and disadvantages of online surveys compared to postal questionnaire surveys. The tally of advantages and disadvantages in connection with online surveys relates to both email and Web surveys. It should also be made clear that, by and large, online surveys and postal questionnaires suffer from one disadvantage relative to personal and telephone interviews—namely, that the researcher can never be certain that the person answering questions is who the researcher believes him or her to be.

Advantages

1. *Low cost.* Even though postal questionnaire surveys are cheap to administer, there is evidence that email surveys in particular are cheaper. This is in part due to the cost of postage, paper, envelopes, and the time taken to stuff covering letters and questionnaires into envelopes with postal questionnaire surveys. However, with Web surveys, there may be start-up costs associated with the software needed to produce the questionnaire.
2. *Faster response.* Online surveys tend to be returned considerably more quickly than postal questionnaires.
3. *Attractive formats.* With Web surveys, there is the opportunity to use a wide variety of stylistic formats for presenting questionnaires and closed-question answers. Also, automatic skipping when using filter questions and the possibility of immediate downloading of questionnaire replies into a database make this kind of survey quite attractive for researchers.
4. *Mixed administration.* They can be combined with postal questionnaire surveys so that respondents have the option of replying by post or online. Research reviewed in this chapter suggests that, although there is some evidence that the mode of administration can make some difference to the kinds of replies generated, in many cases that difference is not great.
5. *Unrestricted compass.* There are no constraints in terms of geographical coverage. The same might be said of postal questionnaire surveys, but the problems of sending respondents stamped addressed envelopes that can be used in their own countries is overcome.

6. *Fewer unanswered questions.* There is evidence that online questionnaires are completed with fewer unanswered questions than postal questionnaires, resulting in less missing data. However, there is also evidence of little difference between the two modes of administering surveys.
7. *Better response to open questions.* To the extent that open questions are used, they tend to be more likely to be answered online and to result in more detailed replies.
8. *Better data accuracy, especially in Web surveys.* Data entry is automated, so that the researcher does not have to enter data into a spreadsheet, and therefore errors in data entry are largely avoided.

Disadvantages

1. *Low response rate.* Typically, response rates to online surveys are lower than those for comparable postal questionnaire surveys.
2. *Restricted to online populations.* Only people who are available online can reasonably be expected to participate in an online survey. This restriction may gradually ease over time, but, since the online population differs in significant ways from the non-online population, it is likely to remain a difficulty. On the other hand, if online populations are the focus of interest, this disadvantage is unlikely to prove an obstacle.
3. *Requires motivation.* As online survey respondents must be online to answer the questionnaire, if they are having to pay for the connection and perhaps are tying up their telephone lines, they may need a higher level of motivation than postal questionnaire respondents. This suggests that the solicitation to participate must be especially persuasive.
4. *Confidentiality and anonymity issues.* It is normal for survey researchers to indicate that respondents' replies will be confidential and that they will be anonymous. The same suggestions can and should be made with respect to online surveys. However, with email surveys, since the recipient must return the questionnaire either embedded within the message or as an attachment, respondents may find it difficult to believe that their replies really are confidential and will be treated anonymously. In this respect, Web surveys may have an advantage over email surveys.
5. *Multiple replies.* With Web surveys, there is a risk that some people may mischievously complete the questionnaire more than once. There is much less risk of this with email surveys.

Sources: Schaeffer and Dillman (1998); Tse (1998); Kent and Lee (1999); Sheehan and Hoy (1999); Cobanoglu et al. (2001); Denscombe (2006); www.geog.le.ac.uk/orm/questionnaires/quesads.htm (accessed 10 December 2010).

Table 28.1

The strengths of email and Web-based surveys in relation to face-to-face interview, telephone interview, and postal questionnaire surveys

Issues to consider	Mode of survey administration				
	Face-to-face interview	Telephone interview	Postal questionnaire	Email	Web
Resource issues					
Is the cost of the mode of administration relatively low?	✓	✓✓	✓✓✓	✓✓✓	✓ (unless access to low-cost software)
Is the speed of the mode of administration relatively fast?	✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓
Is the cost of handling a dispersed sample relatively low?	✓ (✓✓ if clustered)	✓✓✓	✓✓✓	✓✓✓	✓✓✓
Does the researcher require little technical expertise for designing a questionnaire?	✓✓✓	✓✓✓	✓✓✓	✓✓	✓

Table 28.1

Continued

Issues to consider	Mode of survey administration				
	Face-to-face interview	Telephone interview	Postal questionnaire	Email	Web
Sampling-related issues					
Does the mode of administration tend to produce a good response rate?	✓✓✓	✓✓	✓	✓	✓
Is the researcher able to control who responds (i.e. the person at whom it is targeted is the person who answers)?	✓✓✓	✓✓✓	✓✓	✓✓	✓✓
Is the mode of administration accessible to all sample members?	✓✓✓	✓✓	✓✓✓	✓ (because of the need for respondents to be accessible online)	✓ (because of the need for respondents to be accessible online)
Questionnaire issues					
Is the mode of administration suitable for long questionnaires?	✓✓✓	✓✓	✓✓	✓✓	✓✓
Is the mode of administration suitable for complex questions?	✓✓✓	✓	✓✓	✓✓	✓✓
Is the mode of administration suitable for open questions?	✓✓✓	✓✓	✓	✓✓	✓✓
Is the mode of administration suitable for filter questions?	✓✓✓ (especially if CAPI used)	✓✓✓ (especially if CATI used)	✓	✓	✓✓✓ (if allows jumping)
Does the mode of administration allow control over the order questions are answered?	✓✓✓	✓✓✓	✓	✓	✓✓✓
Is the mode of administration suitable for sensitive questions?	✓	✓✓	✓✓✓	✓✓✓	✓✓✓
Is the mode of administration less likely to result in non-response to some questions?	✓✓✓	✓✓✓	✓✓	✓✓	✓✓
Does the mode of administration allow the use of visual aids?	✓✓✓	✓	✓✓✓	✓✓	✓✓✓
Answering context issues					
Does the mode of administration give respondents the opportunity to consult others for information?	✓✓	✓	✓✓✓	✓✓✓	✓✓✓
Does the mode of administration minimize the impact of interviewers' characteristics (gender, class, ethnicity)?	✓	✓✓	✓✓✓	✓✓✓	✓✓✓
Does the mode of administration minimize the impact of the social desirability effect?	✓	✓✓	✓✓✓	✓✓✓	✓✓✓
Does the mode of administration allow control over the intrusion of others in answering questions?	✓✓✓	✓✓	✓	✓	✓
Does the mode of administration minimize the need for respondent to have certain skills to answer questions?	✓✓✓	✓✓✓	✓✓	✓ (because of the need to have online skills)	✓ (because of the need to have online skills)
Does the mode of administration enable respondents to be probed?	✓✓✓	✓✓✓	✓	✓✓	✓
Does the mode of administration reduce the likelihood of data entry errors by the researcher?	✓	✓	✓✓	✓	✓✓✓

Notes: Number of ticks indicates the strength of the mode of administration of a questionnaire in relation to each issue. More ticks correspond to more advantages in relation to each issue. A single tick implies that the mode of administering a questionnaire does not fare well in terms of the issue in question. Three ticks implies that it does very well, but two ticks implies that it is acceptable. This table has been influenced by the author's own experiences and the following sources: Czaja and Blair (1996); Groves et al. (2004); Dillman et al. (2009); and www.geog.le.ac.uk/orm/questionnaires/quesads.htm (accessed 10 December 2010).

CAPI is computer-assisted personal interviewing; CATI is computer-assisted telephone interviewing.

Overview

Online surveys are clearly in their infancy, but they have considerable potential. There is evidence that having a Web survey or even an email option can boost response rates to postal questionnaires (Yun and Trumbo 2000). Several problems have been identified with Web and email surveys, but it is too early to dismiss them because methodologists are only beginning to get to grips with this approach to survey research and may gradually develop ways of overcoming the limitations that are being identified. Moreover, as we have pointed out, for certain kinds of populations and as more and more people and organizations go online, some of the sampling-related

problems will diminish. As Yun and Trumbo (2000) observe: 'the electronic-only survey is advisable when resources are limited and the target population suits an electronic survey.'

It is also worth making the obvious point that, when conducting an online survey, you should bear in mind the principles about sampling, interview design, and question construction that were presented in Chapters 8–11 in particular. While online surveys are distinctive in certain ways, they require the same rigorous considerations that go into the design of conventional surveys that are conducted by postal questionnaire or by personal or telephone interview.



Ethical considerations in Internet research

Conducting research by using the Internet as a method of data collection raises specific ethical issues that are only now starting to be widely discussed and debated. Some of these are related to the vast array of venues or environments in which these new forms of communication and possibilities for research occur, including Web logs (blogs), listservs or discussion groups, email, chatrooms, instant messaging, and newsgroups. The behaviour of Internet users is governed by 'netiquette', the conventions of politeness or definitions of acceptable behaviour that are recognized by online communities, as well as by service providers' acceptable use policies and by data protection legislation, and those contemplating using the Internet as a method of data collection should start by familiarizing themselves with these and by considering the general ethical principles discussed in Chapter 6. However, this section is concerned with the specific ethical issues raised by Internet research. One of the problems faced by social researchers wanting to use the Internet for data collection is that we are clearly in the middle of a huge growth in the amount of research being conducted in this way (M. Williams 2007). Not only is this trend creating the problem of over-researched populations who suffer from respondent fatigue; some of those involved in doing research with this new technology are not adhering to ethical principles. As a result, fatigue and suspicion are beginning to set in among prospective research participants, creating a less than ideal environment for future Internet researchers.

The Association of Internet Researchers recommends that researchers start by considering the ethical expectations established by the venue (www.aoir.org/reports/ethics.pdf (accessed 13 December 2010)). For instance, is there a posted site polity that notifies users that the site is public and specifies the limits to privacy? Or are there mechanisms that users can employ to indicate that their exchanges are private? The more the venue is acknowledged to be public, the less obligation there is on the researcher to protect the confidentiality and anonymity of individuals using the venue, or to seek their informed consent. For example, K. M. Clegg Smith (2004) discovered by chance a listserv on which General Practitioners in the NHS posted their views about organizational changes in the service. This listserv notified participants 'MEMBERS ARE ADVISED TO CONSIDER COMMENTS POSTED TO LISTX TO BE IN THE PUBLIC DOMAIN' (K. M. Clegg Smith 2004: 229; capitalization in original). A further issue is that there are often very large numbers of people involved in the submission of postings, and many of these will no longer be active participants, thus making it difficult if not impossible to seek informed consent. In the case of Smith's research, there were postings from over 500 participants, and the actual membership was in a state of constant change.

However, the distinction between public and private space on the Internet is blurred and contested. Hewson et al. (2003) suggest that data that have been deliberately and voluntarily made available in the public Internet domain, such as newsgroups, can be used by researchers without the need for informed consent,

provided anonymity of individuals is protected. In the course of her research on websites for female sex workers and their male clients, Sanders (2005) acted as a 'lurker', whereby she observed the activity on message boards without revealing her identity as a researcher. In terms of the four categories of studies of online interaction, hers can be classified as 'Type 1. Study of online interaction only with no participation'. She did not reveal her identity, because she did not want to influence participants' behaviour and did not want to trigger hostility that might have adversely affected her research.

A further ethical issue relates to the principle of protecting research participants from harm (see Chapter 6) and the related issues of individual anonymity and confidentiality. Stewart and Williams (2005) suggest that complete protection anonymity is almost impossible in Internet research, since, in computer-mediated communication, information about the origin of a computer-generated message, revealed for instance in the header, is very difficult to remove. It is also more difficult to guarantee confidentiality, because the data are often accessible to other participants. In a similar vein,

DeLorme et al. (2001) suggest that the Internet raises particular ethical concerns for qualitative researchers that arise from the difficulty of knowing who has access to information. For example, a message posted on an Internet discussion group can be accessed by anyone who has a computer and an Internet connection. In addition, some Internet environments enable 'lurkers'—people who listen to what is going on without making themselves identifiable. This makes it difficult for researchers to protect the confidentiality of data that they collect, since others can identify identities even if the researcher conceals them.

However, the debates about the ethics of Internet research and the development of guidelines for researchers are ongoing, and, even though traditional ethical guidelines may need to be revised to reflect the ethical issues raised by Internet research, researchers should continue to be guided by the ethical principles discussed in Chapter 6. For a helpful overview of ethical issues in e-research, see:

www.geog.le.ac.uk/orm/ethics/ethcontents.htm
(accessed 13 December 2010).



Student experience

The ethics of Internet research

As noted in a Student experience box earlier in this chapter, Isabella Robbins used Internet message boards to gain additional data on mothers whose children had not been vaccinated. She was concerned about the ethics of using these media, and this is how she dealt with the issues.

In terms of the ethics of using data from the Internet, I would argue that the Internet is in the realm of the public sphere. I decided that I did not want to contact the women on the message board, because I considered this forum did provide these women with a useful forum in which to debate difficult issues. I considered it unethical to break into that forum. I don't consider that what I was doing was covert. The message board had very visual reminders that the message board is a public space, warning women not to use names, addresses, and phone numbers (although some did). I did contact the press office of the message board, and they referred me to their terms and conditions of using the message board. This acknowledged that it is a public space, and that people using it take responsibility for that. They did not object to me using this data. I told them what I intended to do with it, and that the message board and data would be anonymised.



To read more about Isabella's research experiences, go to the Online Resource Centre that accompanies this book at: www.oxfordtextbooks.co.uk/orc/brymansrm4e/



The state of e-research

It should be apparent from the discussion above that, at least from a methodological viewpoint, e-research is very much a work in progress. New approaches are being developed, new fields of study are being envisioned, and the platforms for conducting research via software and the Internet are changing. The ethical terrain is changing too, and it is likely that some of the practices that were in evidence in the early years of e-research would be less likely to be acceptable now. Arriving at definitive statements about the various components of e-research is difficult because it is in fact an assemblage of research

methods and approaches, each of which is developing in significantly different ways. The growing awareness of the interpenetration of online and offline worlds compounds the complexity of the issues. However, as I hope is clear from the presentation in this chapter, e-research offers huge opportunities for researchers both as a focus for research and as a springboard for doing research. At the same time, a prospective user of e-research has to be aware that, although many methodological conventions have been developed, it is also a fast-developing area of research methodology.



Key points

- The growth in the use of the Internet offers significant opportunities for social researchers in allowing them access to a large and growing body of people.
- Many research methods covered elsewhere in this book can be adapted to online investigations.
- There is a distinction between research that uses websites as objects of analysis and research that uses the Internet to collect data from others.
- Online surveys may be of two major types: Web surveys and email surveys.
- Most of the same considerations that go into designing research that is not online apply to e-research.
- Both quantitative and qualitative research can be adapted to e-research.



Questions for review

The Internet as object of analysis

- In what ways might the analysis of websites pose particular difficulties that are less likely to be encountered in the analysis of non-electronic documents?

Using the Internet to collect data from individuals

- What are the chief ways of collecting data from individuals using the World Wide Web and online communications?
- What advantages do they have over traditional research methods for collecting such data?
- What disadvantages do they have in comparison to traditional research methods for collecting such data?
- What is the difference between Web-based and communication-based research methods?

Online ethnography

- How does ethnography need to be adapted in order to collect data on the use of the Internet?
- Are ethnographies of the Internet really ethnographic?

Qualitative research using online focus groups

- What is the significance of the distinction between synchronous and asynchronous focus groups?
- How different is the role of the moderator in online, as against face-to-face, focus groups?

Qualitative research using online personal interviews

- Can online personal interviews really be personal interviews?
- To what extent does the absence of direct contact mean that the online interview cannot be a true interview?

Online social surveys

- What is the significance of the distinction between email and Web surveys?
- Are there any special circumstances in which embedded email questionnaires will be more likely to be effective than attached questionnaires?
- Do sampling problems render online social surveys too problematic to warrant serious consideration?
- Are response rates in online surveys worse or better than in traditional surveys?

Ethical considerations in Internet research

- What ethical issues are raised by using the Internet as a method of data collection?

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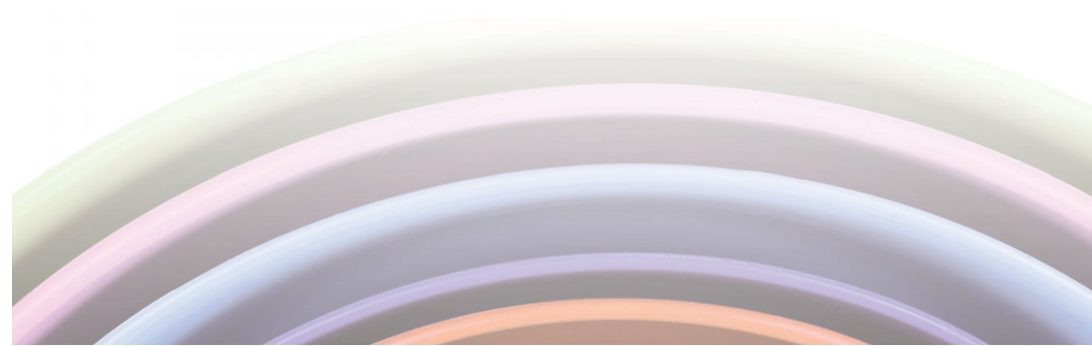
Visit the Online Resource Centre that accompanies this book to enrich your understanding of e-research. Consult web links, test yourself using multiple choice questions, and gain further guidance and inspiration from the Student Researcher's Toolkit.

29

Writing up social research

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Chapter guide

It is easy to forget that one of the main stages in any research project, regardless of its size, is that it has to be written up. Not only is this how you will convey your findings, but being aware of the significance of writing is crucial, because your audience must be persuaded about the credibility and importance of your research. This chapter presents some of the characteristics of the writing-up of social research.

The chapter explores:

- why writing, and especially good writing, is important to social research;
- using examples, how quantitative, qualitative, and mixed methods research are written up;
- the expectations and conventions of writing for academic audiences.

Introduction

The aim of this chapter is to examine some of the strategies that are employed in writing up social research. Initially, we will explore the question of whether quantitative and qualitative research reveal divergent approaches. As we will see, the similarities are frequently more striking and apparent than the differences. However, the main point of this chapter is to extract some principles of good practice that can be developed and incorporated into your own writing. This is an important issue, since many people find writing up research more difficult than carrying it out. On the other hand, many people treat the writing-up stage as relatively unproblematic. But, no matter how well research is conducted, others (that is, your readers) have to be convinced

about the credibility of the knowledge claims you are making. Good writing is, therefore, very much to do with developing your style so that it is *persuasive* and *convincing*. Flat, lifeless, uncertain writing does not have the power to persuade and convince. It is useful to examine the **rhetorical** strategies that social researchers use in order to convince readers of the value of their work when writing up their findings (see Key concept 29.1 on rhetoric).

This chapter will review some of the ways in which social research is written up in order to provide some basic ideas about structuring your own written work if you have to produce something like a dissertation.



Key concept 29.1 What is rhetoric?

The study of rhetoric is fundamentally concerned with the ways in which attempts to convince or persuade an audience are formulated. We often encounter the term in a negative context, such as 'mere rhetoric' or the opposition of 'rhetoric and reality'. However, rhetoric is an essential ingredient of writing, because when we write our aim is to convince others about the credibility of our knowledge claims. To suggest that rhetoric should somehow be suppressed makes little sense, since it is in fact a basic feature of writing. The examination of rhetorical strategies in written texts based on social research is concerned with the identification of the techniques in those texts that are designed to convince and persuade.



Writing up your research

It is easy to neglect the writing stage of your work because of the difficulties that you often encounter in getting your research under way. But—obvious though this point is—your dissertation has to be written. Your findings must be conveyed to an audience, something that all of us who carry out research have to face. The first bit of advice is . . .

Start early

It is easy to take the view that the writing-up of your research findings is something that you can think about after you have collected and analysed your data. There is, of course, a grain of truth in this view, in that you could hardly write up your findings until you know what they are, which is something that you can know only once you have gathered and analysed your data. However, there are good reasons for beginning writing early on, since you might want to start thinking about such issues as

how best to present and justify the research questions that are driving your research or how to structure the theoretical and research literature that will have been used to frame your research questions. Students often tend to underestimate the time that it will take to write up their research, so it is a good idea to allow plenty of time for this, especially if you are expecting your supervisor to read and comment on an early draft, since you will need to allow him or her a reasonable amount of time for this. A further reason why it is advisable to begin writing earlier rather than later is an entirely practical one: many people find it difficult to get started and employ (probably unwittingly) procrastination strategies to put off the inevitable. This tendency can result in the writing being left until the last minute and consequently rushed. Writing under this kind of pressure is not ideal. How you represent your findings and conclusions is a crucial stage in the research process. If you do not provide a convincing account of your research, you will not do justice to it.



Student experience

Writing up is difficult

Several of the students mentioned that they found writing up difficult. Gareth Matthews comments that he 'found this stage the most difficult'. Isabella Robbins admits that writing the chapters presenting her findings was 'the most difficult task of the Ph.D. process'. Having enough time for writing up is a common refrain in their questionnaires. Sarah Hanson's advice is:

The only problem with a writing project of this size is time. As it is always against you, start early, and be organized, do one thing at a time. Work chronologically. Lecturers and markers like to see that you have gone on a journey of exploration into an interesting world and at the end have come out with something worthwhile that has changed your thinking and will hopefully challenge theirs.



To read more about Gareth's, Isabella's, and Sarah's research experiences, go to the Online Resource Centre that accompanies this book at: www.oxfordtextbooks.co.uk/orc/brymansrm4e/

Be persuasive

This point is crucial. Writing up your research is not simply a matter of reporting your findings and drawing some conclusions. Writing up your research will contain

many other features, such as referring to the literature on which you drew, explaining how you did your research, and outlining how you conducted your analysis. But above all, you must be *persuasive*. This means that you must convince your readers of the credibility of your

conclusions. Simply saying 'this is what I found; isn't it interesting' is not enough. You must persuade your readers that your findings and conclusion are significant and that they are plausible.

Get feedback

Try to get as much feedback on your writing as possible and respond positively to the points anyone makes about what they read. Your supervisor is likely to be the main source of feedback, but institutions vary in what supervisors are allowed to comment on. Provide your supervisor with drafts of your work to the fullest extent that regulations will allow. Give him or her plenty of time to provide feedback. There will be others like you who will want your supervisor to comment on their work, and, if he or

she feels rushed, the comments may be less helpful. Also, you could ask others on the same degree programme to read your drafts and comment on them. They may ask you to do the same. Their comments may be very useful, but, by and large, your supervisor's comments are the main ones you should seek out.

Avoid sexist, racist, and disablist language

Remember that your writing should be free of sexist, racist, and disablist language. The British Sociological Association provides very good general and specific advice about this issue, which can be found at:

www.britisoc.co.uk/equality (accessed 28 January 2011).



Tips and skills Non-sexist writing

One of the biggest problems (but by no means the only one) when trying to write in a non-sexist way is avoiding complex his/her formulations. The easiest way of dealing with this is to write in the plural in such circumstances. Consider, for example: 'I wanted to give each respondent the opportunity to complete the questionnaire in his or her own time and in a location that was convenient for him or her.' This is a rather tortuous sentence and, although grammatically correct, it could be phrased more helpfully as: 'I wanted to give respondents the opportunity to complete their questionnaires in their own time and in a location that was convenient for them.'

Structure your writing

It may be that you have to write a dissertation of around 10,000–15,000 words for your degree. How might it be structured? The following is typical of the structure of a dissertation.

Title page

You should examine your institution's rules about what should be entered here.

Acknowledgements

You might want to acknowledge the help of various people, such as gatekeepers who gave you access to an organization, people who have read your drafts and provided you with feedback, or your supervisor for his or her advice.

List of contents

Your institution may have recommendations or prescriptions about the form this should take.

An abstract

A brief summary of your dissertation. Not all institutions require this component, so check on whether it is required. Journal articles usually have abstracts, so you can draw on these for guidance on how to approach this task.

Introduction

The following are some points to consider when writing an introduction.

- You should explain what you are writing about and why it is important. Saying simply that it interests you

because of a long-standing personal interest is not enough.

- You might indicate in general terms the theoretical approach or perspective you will be using and why.
- You should also at this point outline your research questions. In the case of dissertations based on qualitative research, it is likely that your research questions will be rather more open-ended than is the case with quantitative research. But do try to identify some research questions. A totally open-ended research focus is risky and can lead to the collection of too much data, and, when it comes to writing up, it can result in a lack of focus.
- The opening sentence or sentences are often the most difficult of all. Becker (1986) advises strongly against opening sentences that he describes as 'vacuous' and 'evasive'. He gives the example of 'This study deals with the problem of careers', and adds that this kind of sentence employs 'a typically evasive manoeuvre, pointing to something without saying anything, or anything much, about it. *What about careers?*' (Becker 1986: 51). He suggests that such evasiveness often occurs because of concerns about giving away the plot. In fact, he argues, it is much better to give readers a quick and clear indication of what is going to be meted out to them and where it is going.

Literature review

See Chapter 4 for more detailed advice on how to go about writing this chapter of your dissertation. Research questions are often outlined here rather than in the Introduction.

Research methods

The term 'research methods' is meant here as a kind of catch-all for several issues that need to be outlined: your research design; your sampling approach; how access was achieved if relevant; the procedures you used (such as, if you sent out a postal questionnaire, did you follow up non-respondents); the nature of your questionnaire, interview schedule, participant observation role, observation schedule, coding frame, or whatever (these will usually appear in an appendix, but you should comment on such things as your style of questioning or observation and why you asked the things you did); problems of non-response; note taking; issues of ongoing access and cooperation; coding matters; and how you proceeded with your analysis. When discussing each of these issues, you should describe and defend the choices that you made, such as why you used a postal questionnaire rather than a structured interview approach, or why you focused upon that particular population for sampling purposes.



Tips and skills

The importance of an argument

In my experience, one of the things that students find most difficult about writing up their research is the formulation of an argument. The writing-up of research should be organized around an argument that links all aspects of the research process from problem formulation, through literature review and the presentation of research methods, to the discussion and conclusion. Too often, students make a series of points without asking what the contribution of those points is to the overall argument that they are trying to present. Consider what your claim to knowledge is and try to organize your writing to support and enhance it. That will be your argument. Sometimes it is useful to think in terms of seeking to tell a story about your research and your findings. Try to avoid tangents and irrelevant material that may mean that your readers will lose the thread of your argument. If you are not able to supply a clear argument, you are very vulnerable to the 'so what?' question. Ask yourself: 'What is the key point or message that I want my readers to take away with them when they have finished reading my work?' If you cannot answer that simple question satisfactorily (and it may be worth trying it out on others), almost certainly you do not have an argument. The argument is a thread that runs through your dissertation (see Figure 29.1 for an illustration of this).

Figure 29.1

The role of an argument in a dissertation

Dissertation chapter	Commonly used phrases in formulating an argument
Introduction	This dissertation is concerned with ... This dissertation will explore/examine ... There has been a growth of interest in X to which this dissertation will make a contribution. The growing adoption of ... has attracted a lot of interest in the mass media but there is a dearth of research into its actual use.
Literature review	X has attracted a great deal of interest in recent years. In particular, [name1 year] has argued/suggested/noted ... According to [name2 year] the concept of Y can be usefully employed to illuminate X because ... Recent research on X has shown that although the findings are somewhat inconsistent. Therefore, much of the existing research suggests ... By contrast, [name3 year] found/argued/ suggested ... One area of controversy in the literature about X revolves around the question of ... In this dissertation, I will build on [name3]'s suggestion that ... In exploring this issue, the following research questions are proposed: ...
Research methods	Research method1 was employed to answer the research questions because/in order to ... The sampling approach entailed a purposive sampling approach because ... The research followed [name3]'s approach to studying X by ... Questionnaires were administered by postal mail in order to ... A mixed methods approach was taken so that it would be possible to ...
Results/ findings	In exploring the research questions, three main themes were identified ... The findings suggest that ... Interviewees differed in their perspectives on X in two key respects ... As Table 7 shows, women were more likely than men to ... No statistically significant relationship between variable4 and variable15 was uncovered (see Table 4) which suggests that ... This theme is exemplified by Interviewee23's comment that ... By contrast, Interviewee12 pointed out that ...
Discussion	The aim of this study was to ... The findings reported in Table 4 failed to provide empirical support for Hypothesis 2 in that ... The thematic analysis strongly suggests that the concept of Y is very significant for an understanding of ... The findings provide clear evidence that [name2]'s concept of Y can be usefully employed to extend our understanding of X because ... Overall, these findings confirm/fail to provide support for the suggestion that ... Four main themes relating to the research questions emerged. These themes have implications for the investigation of X ... The themes derived from the semi-structured interviews helped to explain the correlation between variable4 and variable9 by suggesting that ...
Conclusion	In conclusion, these findings suggest that [name2]'s concept of Y can provide a useful springboard for the investigation of X because ... A key finding of this research for [name2]'s Z theory is that ... The failure to confirm Hypothesis 2 implies that [name3]'s concept of Y is of questionable utility, since it would be expected that ... The concepts that have been used to research X have been shown to be of some utility but the results are somewhat mixed in that ... Through this research it has been demonstrated that ... The main contribution(s) of this research is (are) ... Taking a mixed methods approach proved beneficial because ... The implications of these findings for the study of X are that ... In conclusion, it is proposed that future research should concentrate on/not rely so much on ... On the basis of the findings generated by this study, it is concluded that ... One limitation of this study is that ...

X refers to a topic or area (e.g. mobile phones, recycling)

Y refers to a concept (e.g. cultural capital, quasi-subject)

Z refers to a theory (e.g. actor network theory, risk society)

Results

In this chapter you present the bulk of your findings. If you intend to have a separate Discussion chapter, it is likely that the results will be presented with little commentary in terms of the literature or the implications of your findings. If there will be no Discussion chapter, you will need to provide some reflections on the significance of your findings for your research questions and for the literature. Bear these points in mind.

- Whichever approach you take, remember not to include *all* your results. You should present and discuss only those findings that relate to your research questions. This requirement may mean a rather painful process of leaving out many findings, but it is necessary, so that the thread of your argument is not lost (see Tips and skills ‘The importance of an argument’ for more on the significance of having a good argument).
- Your writing should point to particularly salient aspects of the tables, graphs, or other forms of analysis you present. Do not just summarize what a table shows; you should direct the reader to the component or components of it that are especially striking from the point of view of your research questions. Try to ask yourself what story you want the table to convey and try to relay that story to your readers.
- Another sin to be avoided is simply presenting a graph or table or a section of the transcript of a semi-structured interview or focus group session without any comment whatsoever, because the reader is left wondering why you think the finding is important.
- When reporting quantitative findings, it is quite a good idea to vary wherever possible the method of presenting results—for example, provide a mixture of diagrams and tables. However, you must remember the

lessons of Chapter 15 concerning the methods of analysis that are appropriate to different types of variable.

- A particular problem that can arise with qualitative research is that students find it difficult to leave out large parts of their data. As one experienced qualitative researcher has put it: ‘The major problem we face in qualitative inquiry is not to get data, but to get rid of it!’ (Wolcott 1990a: 18). He goes on to say that the ‘critical task in qualitative research is not to accumulate all the data you can, but to “can” [i.e. get rid of] most of the data you accumulate’ (Wolcott 1990a: 35). You simply have to recognize that much of the rich data you accumulate will have to be jettisoned. If you do not do this, any sense of an argument in your work is likely to be lost. There is also the risk that your account of your findings will appear too descriptive and lack an analytical edge. This is why it is important to use research questions as a focus and to orient the presentation of your findings to them. It is also important to keep in mind the theoretical ideas and the literature that have framed your work. The theory and literature that have influenced your thinking will also have shaped your research questions.
- If you are writing a thesis—for example, for an M.Phil. or Ph.D. degree—it is likely that you will have more than one and possibly several chapters in which you present your results. Cryer (1996) recommends showing at the beginning of each chapter the particular issues that are being examined in the chapter. You should indicate which research question or questions are being addressed in the chapter and provide some signposts about what will be included in the chapter. In the conclusion of the chapter, you should make clear what your results have shown and draw out any links that might be made with the next results chapter.



Student experience

Do not try to write up everything

You will not be able to write up everything that you have found. Sophie Mason recognized this. She writes:

The great quantity of data meant that I had to use my own judgement as to what data was the most relevant to the aims of the research. I also had to be careful to use visual aids when using complicated statistics to emphasize the importance of the results.

Rebecca Barnes writes:

Because so many important and interesting issues have emerged in the analysis of my data, I have had to be selective; I have chosen to do justice to a smaller number of themes, rather than resorting to superficial coverage of a larger number of themes.



To read more about Sophie's and Rebecca's research experiences, go to the Online Resource Centre that accompanies this book at: www.oxfordtextbooks.co.uk/orc/brymansrm4/



Student experience

The importance of research questions, theory, and the literature in writing up findings

Several students mentioned how important it was for them to keep in mind their research questions and the theory and literature that were driving their research while writing up. For one thing, they help the student to decide which findings to include or to emphasize when writing up. Rebecca Barnes writes:

I chose to have three chapters of my thesis that reported my findings, and I chose the themes that I would include in each of these chapters. These were not, however, set in stone, and have changed in a number of respects from when I first started to plan the writing-up. Each of these chapters addresses one of my main research questions or aims.

Erin Sanders writes:

First I wrote down the main points and ideas I wanted to get across—and how my findings related to [my] research question.'

Hannah Creane's writing-up of her findings was geared to her research questions.

I grouped together questions and responses that concerned similar aspects within the childhood debate and formed three main chapters: What makes a child a child?; Childhood past times; and The child today. Within these chapters I interwove themes that emerged from the data and seemed to be present in most responses.

For Gareth Matthews the theoretical debates about the labour process were crucial:

This has allowed me to frame my thesis theoretically, and to lay the foundations for a discussion of my empirical findings.



To read more about Rebecca's, Erin's, Hannah's, and Gareth's research experiences, go to the Online Resource Centre that accompanies this book at: www.oxfordtextbooks.co.uk/orc/brymansrm4e/

Discussion

In the Discussion, you reflect on the implications of your findings for the research questions that have driven your research. In other words, how do your results illuminate your research questions? If you have specified hypotheses, the discussion will revolve around whether the hypotheses have been confirmed or not, and, if not, you might speculate about some possible reasons for and the implications of their refutation.

Conclusion

The main points here are as follows.

- A Conclusion is not the same as a summary. However, it is frequently useful to bring out in the opening paragraph of the Conclusion your argument thus far. This will mean relating your findings and your discussion of them to your research questions. Thus, your brief summary should be a means of hammering

home to your readers the significance of what you have done.

- You should make clear the implications of your findings for your research questions.
- You might suggest some ways in which your findings have implications for theories relating to your area of interest.
- You might draw attention to any limitations of your research with the benefit of hindsight, but it is probably best not to overdo this element and provide examiners with too much ammunition that might be used against you!
- It is often valuable to propose areas of further research that are suggested by your findings.
- Two things to avoid are engaging in speculations that take you too far away from your data, or that cannot be substantiated by the data, and introducing issues or ideas that have not previously been brought up.

Appendices

In your appendices you might want to include such things as your questionnaire, coding frame, or observation schedule, letters sent to sample members, and letters sent to and received from gatekeepers where the cooperation of an organization was required.

References

Include here all references cited in the text. For the format of the References section you should follow whichever one is prescribed by your department. Nowadays,

the format is usually a variation of the Harvard method, such as the one employed for this book.

Finally

Remember to fulfil any obligations you entered into, such as supplying a copy of your dissertation, if, for example, your access to an organization was predicated on providing one, and maintaining the confidentiality of information supplied and the anonymity of your informants and other research participants.



Student experience

Structure of the dissertation or thesis

Some of the students wrote up their work with a similar structure to the one that has been outlined in this section. Sophie Mason writes:

The research project was written in various stages and split into several different sections; these were as follows: Introduction and Aims, Literature Review, Research Design and Data Gathering, Data Analysis and Research Findings, Conclusions and Recommendations, Appendix and Bibliography.

Erin Sanders writes:

I wrote it in order, introduction, literature review, research design, findings, discussion, and conclusion. I took each section as if it were an essay in and of itself, and attempted to break it down into chunks so as not to get lost in a long document.



To read more about Sophie's and Erin's research experiences, go to the Online Resource Centre that accompanies this book at: www.oxfordtextbooks.co.uk/orc/brymansrm4e/



Tips and skills

Proof reading your dissertation

Before submitting your dissertation, make sure that it is spell-checked and check it for grammatical and punctuation errors. There are many useful guides and handbooks that can be used for this purpose. It may also be useful to ask someone else, such as a friend or family member, to proof read your work in case there are errors that you have missed. As well as being an important presentational issue, this will affect the ease with which your written work can be read and understood. It therefore has the potential to affect the quality of your dissertation significantly.



Writing up quantitative, qualitative, and mixed methods research

In the next three sections, research-based articles that have been published in journals are examined to detect some helpful features. One is based on quantitative research, one on qualitative research, and another on mixed methods research. The presentation of the quantitative and the qualitative research articles raises the question of whether practitioners of the two research strategies employ different writing approaches. It is sometimes suggested that they do, though, when I compared two articles based on research in the sociology of work, I found that the differences were less pronounced than I had anticipated on the basis of reading the literature on the topic (Bryman 1998). One difference that I have noticed is that, in journals, quantitative researchers often give more detailed accounts of their research design, research methods, and approaches to analysis than qualitative researchers. This is surprising, because, in books reporting their research, qualitative researchers provide detailed accounts of these areas. Indeed, the chapters in Part Three of this book rely heavily on these accounts. Wolcott (1990a: 27) has also noticed this tendency: 'Our [qualitative researchers'] failure to render full and complete disclosure about our data-gathering procedures give our methodologically oriented colleagues fits. And rightly so, especially for those among them willing to accept our contributions if we would only provide more careful data about our data.' Being informed that a study was based on a year's participant observation or a number of semi-structured interviews is not enough to gain an acceptance of the claims to credibility that a writer might be wishing to convey.

However, this point aside, in the discussion that follows, although one article based on quantitative research and one based on qualitative research will be examined, we should not be too surprised if they turn out to be more similar than might have been expected. In other words, although we might have expected clear differences between the two in terms of their approaches to writing, the similarities are more noticeable than the differences.

In addition to looking at examples of writing in quantitative and qualitative research, I will examine the matter of how mixed methods research can be written up and explore some guidelines that are being proffered by practitioners. The approach to dealing with the mixed methods research article is slightly different from the

other two in that I will begin with some general suggestions for writing up mixed methods research, as this is an area that has not been given a great deal of attention.

Writing up quantitative research

To illustrate some of the characteristics of the way quantitative research is written up for academic journals, I will take the article by Kelley and De Graaf (1997) that was referred to on several occasions in Chapters 2, 3, 7, and 14 (see especially Research in focus 2.4 and 7.3). I am not suggesting that this article is somehow exemplary or representative, but rather that it exhibits some features that are often regarded as desirable qualities in terms of presentation and structure. The article is based on a secondary analysis of survey data on religion in fifteen nations and was accepted for publication in one of the most prestigious journals in sociology—the *American Sociological Review*, which is the official journal of the American Sociological Association. The vast majority of published articles in academic journals entail the blind refereeing of articles submitted. This means that an article will be read by two or three peers, who comment on the article and give the editors a judgement about its merits and hence whether it is worthy of publication. Most articles submitted are rejected. With highly prestigious journals, it is common for in excess of 90 per cent of articles to be rejected. It is unusual for an article to be accepted on its first submission. Usually, the referees will suggest areas that need revising and the author (or authors) is expected to respond to that feedback. Revised versions of articles are usually sent back to the referees for further comment, and this process may result in the author having to revise the draft yet again. It may even result in rejection. Therefore, an article like Kelley and De Graaf's is not just the culmination of a research process, but is also the outcome of a feedback process. The fact that it has been accepted for publication, when many others have been rejected, testifies to its merits as having met the standards of the journal. That is not to say it is perfect, but the refereeing process is an indication that it does possess certain crucial qualities.

Structure

The article has the following components, aside from the abstract:

1. introduction;
2. theory;
3. data;
4. measurement;
5. methods and models;
6. results;
7. conclusion.

Introduction

Right at the beginning of the introduction, the opening four sentences attempt to grab our attention, to give a clear indication of where the article's focus lies, and to provide an indication of the probable significance of the findings. This is what the authors write:

Religion remains a central element of modern life, shaping people's world-views, moral standards, family lives, and in many nations, their politics. But in many Western nations, modernization and secularization may be eroding Christian beliefs, with profound consequences that have intrigued sociologists since Durkheim. Yet this much touted secularization may be overstated—certainly it varies widely among nations and is absent in the United States (Benson, Donahue, and Erickson 1989: 154–7; Felling, Peters, and Schreuder 1991; Firebaugh and Harley 1991; Stark and Iannaccone 1994). We explore the degree to which religious beliefs are passed on from generation to generation in different nations. (Kelley and De Graaf 1997: 639)

This is an impressive start, because, in just over 100 words, the authors set out what the article is about and its significance. Let us look at what each sentence achieves.

- The first sentence locates the article's research focus as addressing an important aspect of modern society that touches on many people's lives.
- The second sentence notes that there is variety among Western nations in the importance of religion and that the variations may have 'profound consequences'. But this sentence does more than the first sentence: it also suggests that this is an area that has been of interest to sociologists. To support this point, one of sociology's most venerated figures—Émile Durkheim—is mentioned.
- The third sentence suggests that there is a problem with the notion of secularization, which has been a research focus for many sociologists of religion. Several fairly recent articles are cited to support the

authors' contention that there is a possibility that secularization is being exaggerated by some commentators. In this sentence, the authors are moving towards a rationale for their article that is more in terms of sociological concerns than pointing to social changes, which are the main concern of the two opening sentences.

- Then in the fourth sentence the authors set up their specific contribution to this area—the exploration of the passing-on of religious beliefs between generations.

So, by the end of four sentences, the contribution that the article is claiming to make to our understanding of religion in modern society has been outlined and situated within an established literature on the topic. This is quite a powerful start to the article, because the reader knows what the article is about and the particular case the authors are making for their contribution to the literature on the subject.

Theory

In this section, existing ideas and research on the topic of religious socialization are presented. The authors point to the impact of parents and other people on children's religious beliefs, but then assert that 'a person's religious environment is also shaped by factors other than their own and their parents' religious beliefs, and hence is a potential cause of those beliefs . . .' (Kelley and De Graaf 1997: 641). This suggestion is then justified, which prompts the authors to argue that 'prominent among these "unchosen" aspects of one's religious environment is birthplace' (1997: 641). Kelley and De Graaf's ruminations on this issue lead them to propose the first of three hypotheses, which is presented in Research in focus 2.4. This hypothesis stipulates that contextual factors have an impact on religious beliefs. This leads the authors to suggest in two related hypotheses that, in predominantly secular societies, family background will have a greater impact on a person's religious beliefs than in predominantly devout societies, because in the former parents and other family members are more likely to seek to isolate children from secular influences. However, in devout societies this insulation process is less necessary and the influence of national factors will be greater. Thus, we end up with very clear research questions, which have been arrived at by reflecting on existing ideas and research in this area.

Data

In this section, the authors outline the data they drew on for their research. This exposition entails a general

outline of the data sets. The quotation on page 314 is taken from this commentary. The sampling procedures are outlined along with sample sizes and response rates.

Measurement

In this section, Kelley and De Graaf explain how the main concepts in their research were measured. The concepts were: *religious belief* (the questionnaire items used are in Research in focus 7.3); *parents' church attendance*; *secular and religious nations* (that is, the scoring procedure for indicating the degree to which a nation was religious or secular in orientation on a five-point scale); *other contextual characteristics of nations* (for example, whether a former Communist nation or not); and *individual characteristics* (for example, age and gender).

Methods and models

This is a very technical section, which outlines the different ways in which the relationships between the variables might be conceptualized and the implications of using different multivariate analysis approaches for the ensuing findings.

Results

The authors provide a general description of their findings and then consider whether the hypotheses are supported. In fact, it turns out the hypotheses are supported. The significance of other contextual characteristics of nations and individual differences are separately explored.

Conclusion

In this final section, Kelley and De Graaf return to the issues that have been driving their investigation. These are the issues they had presented in the Introduction and Theory sections. They begin the section with a strong statement of their findings: 'The religious environment of a nation has a major impact on the beliefs of its citizens: People living in religious nations acquire, in proportion to the orthodoxy of their fellow citizens, more orthodox beliefs than those living in secular nations' (Kelley and De Graaf 1997: 654). They then reflect on the implications of the confirmation of their hypotheses for our understanding of the process of religious socialization and religious beliefs. They also address the implications of their findings for certain theories about religious

beliefs in modern society, which were outlined in their Theory section:

Our results also speak to the long-running debate about US exceptionalism (Warner 1993): They support the view that the United States is unusually religious. . . . Our results do not support Stark and Iannaccone's (1994) 'supply-side' analysis of differences between nations which argues that nations with religious monopolies have substantial unmet religious needs, while churches in religiously competitive nations like the United States do a better job of meeting diverse religious needs. (Kelley and De Graaf 1997: 655)

The final paragraph spells out some inferences about the ways in which social changes have an impact on levels of religious belief in a nation. The authors suggest that factors such as modernization and the growth of education depress levels of religious belief and that their impact tends to result in a precipitous rather than a gradual fall in levels of religiosity. In their final three sentences, they go on to write about societies undergoing such change:

The offspring of devout families mostly remain devout, but the offspring of more secular families now strongly tend to be secular. A self-reinforcing spiral of secularization then sets in, shifting the nation's average religiosity ever further away from orthodoxy. So after generations of stability, religious belief declines abruptly in the course of a few generations to the modest levels seen in many Western nations. (Kelley and De Graaf 1997: 656)

It might be argued that these reflections are somewhat risky, because the data from which the authors derive their findings are cross-sectional in research design terms rather than longitudinal. They are clearly extrapolating from their scoring of the fifteen nations in terms of levels of modernization to the impact of social changes on national levels of religiosity. However, these final sentences make for a strong conclusion, which itself might form a springboard for further research.

Lessons

What lessons can be learned from Kelley and De Graaf's article? To some extent, these have been alluded to in

the course of the above exposition, but they are worth spelling out.

- There is a clear attempt to grab the reader's attention with strong opening statements, which also act as signposts to what the article is about.
- The authors spell out clearly the rationale of their research. This entails pointing to the continued significance of religion in many societies and to the literature on religious beliefs and secularization.
- The research questions are spelled out in a very specific way. In fact, the authors present hypotheses that are a highly specific form of research question. As noted in Chapter 7, by no means all quantitative research is driven by hypotheses, even though outlines of the nature of quantitative research often imply that it is. Nonetheless, Kelley and De Graaf chose to frame their research questions in this form.
- The nature of the data, the measurement of concepts, the sampling, the research methods employed and the approaches to the analysis of the data are clearly and explicitly summarized in sections 3, 4, and 5.
- The presentation of the findings in section 6 is oriented very specifically to the research questions that drive the research.
- The conclusion returns to the research questions and spells out the implications of the findings for them and for the theories examined in section 2. This is an important element. It is easy to forget that you should think of the research process as closing a circle in which you must return unambiguously to your research questions. There is no point inserting extraneous findings if they do not illuminate your research questions. Digressions of this kind can be confusing to readers, who might be inclined to wonder about the significance of the extraneous findings.

We also see that there is a clear sequential process moving from the formulation of the research questions through the exposition of the nature of the data and the presentation of the findings to the conclusions. Each stage is linked to and follows on from its predecessor. The structure used by Kelley and De Graaf is based on a common one employed in the writing-up of quantitative research for academic journals in the social sciences. Sometimes there is a separate Discussion section that appears between the Results and the Conclusion. Another variation is that issues of measurement and analysis appear in the same section as the one dealing with research methods, but perhaps with distinct subheadings.

Writing up qualitative research

Now we will look at an example of a journal article based on qualitative research. Again, I am not suggesting that the article is exemplary or representative, but that it exhibits some features that are often regarded as desirable qualities in terms of presentation and structure. The article is one that has been referred to in previous chapters, in particular Chapter 1 (see especially Table 1.1): a study of retired senior managers by Jones et al. (2010). The study is based on semi-structured interviews and was published in *Sociology*, a leading British journal published on behalf of the British Sociological Association.

Structure

The structure runs as follows:

1. introduction;
2. background;
3. methods;
4. findings;
5. discussion;
6. conclusion.

What is immediately striking about the structure is that it is not dissimilar to Kelley and De Graaf's (1997). Nor should this be all that surprising. After all, a structure that runs

Introduction → Literature review → Research design/
methods → Results → Discussion → Conclusions

is not obviously associated with one research strategy rather than the other. As with Kelley and De Graaf's article, we will examine the writing in terms of the article's structure.

Introduction

The first five sentences provide an immediate sense of what the article is about and where its focus lies:

Many commentators argue that we are in the midst of a profound restructuring of social life that operates at both a global level (Held et al. 1999) and at the level of what has been described as the institutionalized life course (Kohli 1986; Phillipson 2002). This has given impetus to those who claim that modernity has been rearranged around the key organizing principle of reflexive individualization, which has unintended side

effects as assumptions of functional differentiation and the 'better calibration of ends with means' break down (Beck et al. 2003; Latour 2003). These transformations have had both positive and negative impacts on retirement and later life (Phillipson and Smith 2005). In the UK this has led to a decline in the proportion of older people living in poverty and increasing numbers of retired people being fit and healthy and benefiting from occupational pensions (Hills 2004; Thane 2000). But there also appears to be a concomitant increase in inequalities in old age (Brewer et al. 2006). (Jones et al. 2010: 104)

Like Kelley and De Graaf's, this is a strong introduction. We can look again at what each sentence achieves.

- The first sentence makes clear that the research is concerned with issues to do with the study of the nature of modernity in relation to the life course.
- The third sentence provides us with the specific research focus—the study of retirement and later life—and makes a claim for our attention by suggesting that this is a topic that is very salient to issues to do with the transformations identified in the first two sentences. It is striking that by this point some key social theorists of the day, such as Beck and Latour, have been referred to as well as some significant literature relating to retirement and the nature of modernity.
- The fourth sentence relates the theoretical issues briefly outlined in the first three sentences to what the authors take to be an important social trend relating to retirement and later life.
- The fifth sentence is attention-grabbing in that it brings the suggestion of an interesting contrast—increasing fitness and health in later life but at the same time growing inequalities.

Thus, after around 170 words, the reader has a clear idea of the focus of the research and how its empirical focus on retirement will connect with significant sociological and social concerns. The remainder of the Introduction outlines the theoretical issues that provide the rationale for the article. Towards the end of this section the authors helpfully provide the reader with a link between their review of the relevant theories and the focus of the article: 'This article therefore utilizes the prism of second modernity to address the ways in which retirement,

for some, is actively constructed as a lifestyle option or choice as opposed to forms of retirement constructed around financial need and fitting in with a normal stage in the life course' (Jones et al. 2010: 105, emphasis in original). They then proceed in the same paragraph to outline the nature of the research on which the article is based and the research questions that drove the data collection and analysis. These research questions can be found in Table 1.1.

Background

In this section, the literature on retirement is reviewed. This review is helpfully organized into two sections. The first—'Reasons for Taking Early Retirement: Timing, Choice and Compulsion'—reviews the literature on early retirement in particular. The second—'Later Life and Reflexivity'—also includes an assessment of relevant literature, but also draws attention to a potentially interesting contrast of commentators who have suggested that retirement is often associated with isolation and those who have suggested that it is associated with a complex set of accommodations in which notions of self and identity are frequently realigned.

Methods

In this section, the authors outline:

- who was to be studied and why;
- how respondents were recruited. This includes a table showing some of the socio-demographic characteristics of each sample member (age, years since retirement, previous job title, and gender);
- the semi-structured interviewing approach. No rationale for using this method is given at this point but at the end of the first section the authors signalled that their research approach was designed to uncover the meanings and experiences of early retirement for retirees;
- the number of people interviewed and the context in which the interviews took place;
- the approach to analysing the interview transcripts (thematic analysis) and the use of CAQDAS is mentioned.

Findings

This section begins by saying that three themes emerged from the analysis. The themes are briefly outlined and then there are subsections for each of them in which the findings relating to each theme are elaborated. For example, one of the themes is 'Third age identities and the

quasi-subject', which, the authors point out, has affinities with the writings of theorists like Beck in positing the growing significance of a reflexive quasi-subject with fluid rather than fixed identities and of an emphasis on spontaneity. They note that interviewees varied in their responses to the new and varied opportunities offered by their early retirement between those who embraced their new situation and those who felt at a loss to know how best to respond. For all of the three themes there is considerable use of passages from the interview transcripts. Thus, as an example of someone who embraces a positive and fluid view of retirement, 'interview 16' contains the following passage, which is quoted:

I was looking for the ability to do things when you want to do them; to be able to go out for the day on the day you wanted to, the day the sun was shining and not at the weekend when it was pouring with rain. (pause) I do enjoy writing, I enjoy lecturing and things like that, and workshops and things like that, so I was really looking at various things and my wife being a lecturer is also interested in those sort of things, and we work together on that. (Jones et al. 2010: 112)

Thinking deeply 29.1 looks in greater detail into the use of verbatim quotations in social science publications.



Thinking deeply 29.1

Using verbatim quotations from interviews

It is striking that, in presenting their findings, Jones et al. (2010) use verbatim quotations to reinforce the points they are making (as they do with 'interview 16' above). They do so by including the quotations as they go along to reinforce or illustrate points they are making about the themes they extracted from their data. This is quite a common approach to the use of verbatim interview quotations. However, I have noticed in certain US publications in particular a slightly different approach that I suspect is very much associated with what Adler and Adler (2008) call 'mainstream ethnography' (see Chapter 19). Here, the tone and mode of presenting the findings is very formal and conforms to traditional, mainstream expectations of what a research article should comprise. In particular, there is a 'definite harkening to a more positivistic style' in the presentation of findings, which is associated with a 'generic and impersonal' use of quotations (Adler and Adler 2008: 13, 14). One way in which this is revealed in some US journals is that verbatim quotations are presented in a formal manner in tables rather than *en passant*. An example can be found in Table 29.1 which is taken from Maitlis and Lawrence's (2007) multiple case study ethnography of three British orchestras. The article was published in a leading journal and adopts the mainstream ethnography frame. This can be discerned in the more formalistic tone than is usually encountered in the other writing frames identified by Adler and Adler. The article is about how 'sensegiving' takes place in organizations—that is, how leaders and others frame perceptions for others. One of the key themes identified was the competence of the leader, and this theme had three components (referred to as 'first-order concepts'). Maitlis and Lawrence provided 'representative quotations' for each of the three components in a table (see Table 29.1). This style of presenting quotations has become noticeably popular in some leading journals. I suspect the reasons are that: the provision of a table provides a sense of something equivalent to the more commonly encountered table summarizing the results of a statistical procedure; it provides a more formal style in keeping with the prevalent tone of such journals; and possibly it gives less of a sense that the quotations are anecdotal or 'cherry-picked'.

Corden and Sainsbury (2006) conducted research into qualitative researchers' use of such quotations. They found that researchers employ verbatim quotations for interview transcripts for a variety of reasons, such as: to illustrate a point; to give voice to participants; to provide evidence; or to deepen readers' understanding. When Corden and Sainsbury examined a wide range of publications in the social policy field, they found a wide variety of approaches to the use of quotations. There was a great deal of variety in how those quoted are referred to and in editing conventions, such as the removal of 'er' and 'erm' and of false starts, as well whether pauses or laughter are indicated. Thus, there is a wide variety of practice in the use of verbatim quotations. Corden and Sainsbury recommend that researchers should decide which approach they want to use and why and be able to justify the choice made if necessary.

Table 29.1

The use of verbatim interview quotations in a table

Data Supporting the Theme 'Perceptions of a Lack of Leader Competence'

Associated First-Order Concepts	Representative Quotations
<i>Poor organizational decision process</i>	2.1 '[The associate leader] expressed concern over the lack of information from the office and wondered whether enough was being done to seek out potential leaders to work with the orchestra.' (minutes, BSO orchestra committee meeting) (BSO5) 2.2 Commenting on the appointment decision process for an orchestra leader: 'It's one incredible grey area. Nobody seems to know what's happening with that and no one seems to know whose responsibility it is. . . . Eventually, the principals just made it so clear that basically they weren't happy [that the appointment was not made]. . . . But we have a theory that he may have promised the guy the job first, and got himself into a pickle.' (interview, BSO orchestra committee member) (BSO5) 2.3 Commenting on a decision not to terminate a player, a LSO player board member commented: 'There was a decision over this player. The vote was taken and it went against the wishes of the chairman, and he said, "Well okay, we'll call a council of principals meeting". . . . Most of the principals are more than happy to sit on the fence. They've got a hard enough job. They don't want to put their oar in and stir things up, so of course the vote went the other way. Now I think that's a misuse of power, if you like. You're widening the goal posts and moving them at the same time. I was more than a little pissed off about that because it didn't seem to be fair. What was the point of having a [board]?' (interview, LSO player board member) (LSO5)
<i>Poor outcomes of leader decision making</i>	2.4 'Programming is [the senior producer]—you couldn't ask for better repertoire. [The senior producer] is very successful. He has organized some very good programmes and concerts.' (interview, BSO player) (BSO1) 2.5 'Looking back on all this. I would say that those judgments [of the chief executive] were fatally flawed for our organization on two counts: [the principal conductor's] availability and commitment, and his financial cost.' (interview, PSO player director) (PSO2) 2.6 'It was like lambs to the slaughter. The contract [the principal conductor] was offered should never have been accepted.' (interview, PSO deputy CEO) (PSO2) 2.7 'If you look at the main [home city] concerts, something has happened there, and we've lost our thread, because we had three distinct series. . . . So I think the [PSO], represented by the board and the senior management, has a duty to make sure that the repertoire actually fulfils the artistic strategy.' (interview, PSO player chairman-elect) (PSO1)
<i>Lack of leader expertise</i>	2.8 '[We need] someone who knows what they're doing, who has sufficient commercial grasp to know the effect of what they're doing, and appreciates the need to create a programme for [the PSO home city] that will also apply in [other regional towns]. It's that thorough vision that is lacking at the moment, causing all sorts of orchestral problems.' (interview, PSO finance director) (PSO1) 2.9 'You have someone here [the chief executive] who has no understanding of orchestras at all.' (observation, musicians' union representative, PSO players meeting with musicians' union) (PSO6)

Source: Maitlis and Lawrence (2007: 67); reproduced with permission.

Discussion

This section outlines the findings in the context of some of the literature that was covered in the first two sections of the article. In other words, the authors draw the significance of their findings in relation to the theoretical issues and literature that they had previously examined. There is also a subsection in which the authors draw attention to the limitations of the study. They note in particular the fact that theirs is a purposive sample that was

deliberately selected to include people who had chosen to take early retirement and who were likely to have the resources to enjoy third age lifestyles. As such, it cannot be generalized to retirees who do not meet these criteria.

Conclusions

In this section, the authors return to many of the ideas and themes that had driven their research. For example, at one point the authors assess the implications of their

findings for some of the main concepts that drove the investigation, such as the notion of a reflexive quasi-subject:

the respondents gave accounts of the experience of and expectations for early retirement that resonated with the concept of a reflexive, individualized, quasi-subject. Retirement was not associated with old age and was related to the opening up of new and multiple lifestyle choice where the emphasis was on spontaneity and more fluid forms of identity. The positive up-beat accounts of third age lifestyles were, however, balanced by concerns about status. Respondents in this study appeared to wish to maintain their social status in line with that achieved during their work careers. (Jones et al. 2010: 116)

In their final paragraph they make clear what they regard as the principal contribution of their research, which revolves around the notion of a 'generational habitus' in retirement—an emphasis on individuality, choice, and self-expression' (Jones et al. 2010: 105) among retirees of a particular era—which they propose warrants further attention.

Lessons

As with Kelley and De Graaf's article, it is useful to review some of the lessons learned from this examination of the article by Jones et al.

- Just like the illustration of quantitative research writing, there are strong opening sentences, which attract our attention and give a clear indication of the nature and content of the article.
- The rationale of the research is clearly identified. To a large extent, this revolves around identifying the theoretical credentials of the research in terms of a stream of theorizing associated with notions of modernity and individuality and identity.
- Research questions are specified but they are somewhat more open-ended than in Kelley and De Graaf's article, which is in keeping with the general orientation of qualitative researchers. The research questions revolve around the issue of new constellations of choice and self-expression among retirees.
- The research design and methods are outlined and an indication is given of the approach to analysis. The section in which these issues are discussed demonstrates greater transparency than is sometimes the case with articles reporting qualitative research.
- The presentation and discussion of the findings are geared to the broad research questions that motivated the researchers' interest in modernity and retirement.

The links with specific items in the literature are clearly outlined.

- The discussion and conclusion elucidate in a more specific way the significance of the results for the research questions. They also explore the implications of this investigation into early retirement for the theoretical issues that guided the article's opening two sections. In the final paragraph, there is a clear and succinct statement of the article's major theoretical contributions.

Writing up mixed methods research

Partly because interest in and the practice of mixed methods research has gained momentum only in relatively recent times, it has few writing conventions. More particularly, it is difficult to say what an exemplary or model mixed methods research journal article might look like. To a certain extent, it is bound to borrow some of the conventions associated with writing up quantitative and qualitative research in terms of needing to start out with a research focus in the sense of a research problem and/or some research questions. Creswell and Tashakkori (2007: 108), the former editors of the *Journal of Mixed Methods Research*, have suggested that 'good original/empirical mixed methods articles' should be:

- 'well-developed in both quantitative and qualitative components' (Creswell and Tashakkori 2007: 108); and
- 'more than reporting two distinct "strands" of quantitative and qualitative research; these studies must also integrate, link, or connect these "strands" in some way' (Creswell and Tashakkori 2007: 108).

They actually add a third feature of good mixed methods articles—namely, that they contribute to the literature on mixed methods research in some way. This seems a rather tall order for many writers and researchers, so that I would tend to emphasize the other two features.

The first implies that the quantitative and the qualitative components of a mixed methods article should be at the very least competently executed. This means that, in terms of the fundamental criteria for conducting good quantitative and good qualitative research, mixed methods research should conform to both quantitative and qualitative research criteria. In terms of writing, it means that, for each of the components, it should be clear what the research questions were, how the sampling was done, what the data-collection technique(s) was or were, and how the data were analysed.

The second feature implies that a good mixed methods article will be more than the sum of its parts. This issue

relates to a tendency that has been identified by some writers (e.g. Bryman 2007c; O’Cathain et al. 2007) for some mixed methods researchers not to make the best use of their quantitative and qualitative data, in that they often do not link the two sets of findings so that they extract the maximum yield from their study. As Creswell and Tashakkori (2007: 108) put it:

The expectation is that, by the end of the manuscript, conclusions gleaned from the two strands are integrated to provide a fuller understanding of the phenomenon under study. Integration might be in the form of comparing, contrasting, building on, or embedding one type of conclusion with the other.

To some extent, when writing up the results from a mixed methods study, researchers might make it easier for themselves to get across the extra yield associated with their investigations if they make clear their rationales for including both quantitative and qualitative components in their overall research strategy. The issue of rationales for conducting mixed methods research is one that was addressed in Chapter 27 (especially Thinking deeply 27.3).

Further advice on writing up mixed methods research can be found in suggestions in Creswell and Plano Clark’s (2011: 264) delineation of a structure for a mixed methods journal article. They suggest that the structure should be along the following lines.



Tips and skills

Do not separate your quantitative from your qualitative findings

I have noticed that some students who conduct mixed methods investigations treat their quantitative and qualitative findings as separate domains, so that they present one set and then the other. In Ph.D. theses and Master’s dissertations, this can take the form of separate chapters labelled something like ‘survey findings’ and ‘qualitative interview findings’. This may not be a problem if the two (or more) sets of findings are then integrated in the Discussion sections or chapters. However, treating findings in this way does tend to encourage a view of the quantitative and the qualitative findings as separate spheres and may therefore militate against integration, which, as writers like Creswell and Tashakkori (2007) imply, is increasingly an expectation in mixed methods studies. Instead, try to think of the quantitative and the qualitative findings thematically across the two sets of results, so that the findings are presented in terms of substantive issues rather than in terms of different methods.

Creswell and Plano Clark (2011: 258–9) provide an example outline structure of a mixed methods dissertation or thesis that derives from a doctoral dissertation submitted at the University of Nebraska-Lincoln. The thesis has separate chapters for the qualitative and then the quantitative results, which is different from the kind of structure proposed by the authors for a mixed methods journal article. This separation of the presentation of the two sets of findings may have been appropriate for the research on which this thesis was based, but I feel uneasy about any implication that it might be a model structure, though Creswell and Plano Clark do not suggest that it is. Separating the quantitative and qualitative findings may sometimes be appropriate—for example, when the overall research project is designed to answer rather separate research questions—but as a general principle I do not think it is advisable.

- **Introduction.** This would include such features as: a statement of the research problem or issue; an examination of the literature on the problem/issue; an examination of the problems with the prior literature, which might include indicating why a mixed methods approach would be beneficial, perhaps because much of the previous research is based mainly on just quantitative or qualitative research; and the specific research questions.
- **Methods.** This would include such features as: indicating the rationale for the mixed methods approach; the type of mixed methods design (see Thinking deeply 27.2); data-collection and data-analysis methods; and indications of how the quality of the data can be judged.

- **Results.** The quantitative and the qualitative findings might be presented either in tandem or sequentially, but, if the latter, they would need to be merged in the Discussion.
- **Discussion.** Summarize and explain results, emphasizing the significance of the mixed methods nature of the research and what is gained from the presence of both quantitative and qualitative findings; draw attention to any limitations of the investigation; and possibly suggest avenues for future research.

In terms of the overall structure, Creswell and Plano Clark's (2011) suggestions are more or less the same as for an article based on quantitative research or an article based on qualitative research (see above). It is in the need to outline the mixed methods nature of the research and to bring the two sets of findings together that the distinctiveness of a mixed methods journal article can be discerned.

An example of mixed methods writing

Many of these features can be seen in the study of the foot and mouth disease (FMD) crisis by Poortinga et al. (2004). This article has been previously encountered in Research in focus 2.8 and 27.3. It may be worth looking back at these two accounts as a reminder of the study. The following examination of the writing of this article is organized in terms of its structure.

Introduction

The article begins with a very strong and clear statement of the focus of the article and its methodological leanings:

Thirty years of empirical work on public perceptions have generated an impressive body of findings on attitudes to the consequences, benefits and institutional profiles of a range of important risk issues . . . However, much of the available research tends to have been conducted when the risk issues studied are not particularly salient in public debate. Although there is some evidence from opinion polling, risk perception studies are rarely conducted during a major risk crisis. The present study examines public attitudes to risk and its management during one such crisis: the 2001 Foot and Mouth Disease (FMD) epidemic in Britain. A mixed method study design was employed, specifically a quantitative survey conducted at the height of the epidemic followed up by qualitative focus groups comprising individuals who had participated in the survey. Recent studies have shown that combining

different research methods can provide a more comprehensive view on risk issues than can any one methodology alone . . . (Poortinga et al. 2004: 73–4)

This opening passage accomplishes the following:

- It locates the study immediately in the literature on risk.
- It provides a justification for conducting the study at the time of the FMD crisis.
- It identifies itself as a mixed methods study and provides a rationale for a mixed methods approach.

The authors then go on to outline the structure of the article so that the reader has a route map for what is to come.

The British 2001 foot and mouth crisis

The authors outline the origins of the crisis, its timing, its extent, and its effects. As a result, the reader is left with a clear understanding of the nature of the FMD crisis.

Government policy, trust, and public reactions to the FMD epidemic

This section provides a justification for the researchers' emphasis on the significance of trust in the government and its policies and draws attention to related literature on the topic. For example, the authors draw attention to a study of trust in relation to another food-related crisis in Britain, the BSE crisis:

Losing trust, as occurred to the British government over the BSE (mad cow) crisis in the mid-1990s, may have far-reaching consequences (Slovic, 1993), as people become suspicious about new government policy interpreted in the light of earlier experiences, perhaps turning elsewhere for information and advice. So, it is vitally important to have some gauge of public response. Not only regarding perceptions of the FMD crisis as an event within society, but also as a test case of the impacts of government policy and industry responsiveness in the UK in the wake of the BSE crisis. (Poortinga et al. 2004: 75)

They then outline the nature of their study in broad-brush terms, pointing out that it comprised a survey and focus groups. The authors explain that they emphasized in their research four aspects of FMD and its management (see below) and that they were also keen to examine

how perceptions of them differed between the two communities (see Research in focus 2.8).

Methodology

The discussion of the research design and research methods is divided into three sections.

1. *Study locations.* The two communities—Bude and Norwich—are examined, along with a justification for using these two communities, when they write that they wanted ‘to find out more about differences in attitudes between communities that were differentially affected by the epidemic’ (Poortinga et al. 2004: 75).
2. *The questionnaire survey.* The authors explain how and when the questionnaires were distributed in Bude and Norwich. They outline the kinds and formats of the questions that were asked. They provide the response rates for the two surveys and examine the comparability of the ensuing samples.
3. *Focus groups.* The authors explain that the focus group participants were selected from the questionnaire survey samples. They provide data on the numbers of participants and of focus groups, when they took place, and how long the sessions lasted. The topics for discussion are also summarized.

Results

The findings are organized into four numbered sections, each of which deals with one of the four aspects of FMD and its management that were indicated earlier in the article: public risk perceptions of FMD; blame; government handling of the FMD crisis; and trust in information about FMD. It is very striking that, when presenting data for each of the four aspects of FMD they explored, the authors present both the quantitative and the qualitative findings, examining how the two interrelate. For example, when discussing the first of the four aspects—public risk perceptions of FMD—they begin by presenting some questionnaire data about respondents’ levels of concern about FMD. These questionnaire data derive from Likert items that asked about levels of agreement with statements like ‘My main concerns about FMD are to do with the possible impacts on the health and welfare of animals’. A table is presented showing mean levels of agreement with this and five other items, with the data being presented for the whole sample, as well as for Bude and Norwich separately. They then present the focus group findings, noting that the ‘findings of the focus groups reinforce those of the questionnaire regarding general concern’ (Poortinga et al. 2004: 78). The focus groups

found that participants were deeply concerned about the slaughter of animals and the rotting carcasses, whereas the questionnaires did not pick up this point. The possible health effects of these rather than of the disease itself was a concern (the survey and the focus group results both suggest that there was a low level of concerns about the direct health effects of FMD).

Discussion

The Discussion section begins by outlining the rationale for the mixed methods study and what has been gleaned from it:

The aim of this mixed methodology study was to investigate public reactions to the FMD epidemic, support for government policies to get FMD under control, and trust in information about FMD. More specifically, a quantitative survey and qualitative focus groups were conducted to examine how two separate communities that were affected to different degrees by the epidemic responded to the crisis. In this study, the focus groups were mainly used to illustrate the findings of the questionnaire. The focus groups provided valuable additional information, especially on the reasons, rationalizations and arguments behind people’s understanding of the FMD issue. (Poortinga et al. 2004: 86)

Thus, the authors restate the mixed methods nature of the investigation and the rationale for the different components. They then proceed to provide a detailed summary of the main findings. This account of the key findings is set in the context of other crises, like the BSE crisis, and existing literature on crisis management. They reflect in some detail on the differences between Bude and Norwich. The final paragraph provides a very strong concluding statement:

In conclusion, the combination of a questionnaire survey and a focus group study gave a comprehensive view on people’s perceptions and responses to the 2001 FMD epidemic. The unique aspect of this study is that it has captured perceptions during the FMD crisis. Although it only gives a snapshot of public attitudes to risk and its management, it provided a vivid picture of people’s perceptions and debates on FMD at the height of the epidemic. Further research may provide insight in the dynamics and the long-term effects of the disease. Some studies have shown that risk perception can be related to the amount of press coverage that is given to that

particular risk (Renn et al. 1992). Additional studies may provide answers on how a range of different drivers, such as the media, policy measures, and local and individual events (see e.g. Pidgeon et al. 2003) take on various levels of importance for people's reaction to a crisis such as FMD. Taken as a whole, this study suggests that risk perceptions of a crisis are embedded in both local and national social contexts. (Poortinga et al. 2004: 89)

This final paragraph is significant and well crafted for several reasons:

- The first sentence restates the mixed methods nature of the study and that its primary rationale was to provide a 'comprehensive' overview of the topic.
- The major contribution of the research—that it was conducted in the course of the crisis—is suggested to the reader in the second sentence.
- The third sentence provides a brief indication of a limitation of the study ('only gives a snapshot') but then invites the reader not to dwell on this limitation by suggesting that the research 'provided a rich description'.
- The next three sentences suggest future potentially fruitful avenues for enquiry.
- The final sentence provides a final message for readers to take away with them—namely, that 'risk

perceptions of a crisis are embedded in both local and national social contexts'.

This is a very strong final and concluding paragraph that leaves readers in no doubt about what the authors believe is the major contribution of their findings and that reminds them of the significance of the fact that it is a mixed methods study.

One feature of this article that is quite striking is that in terms of structure and overall approach it is quite similar to the quantitative and the qualitative research articles previously examined. Indeed, it was noted that the qualitative research article was not dissimilar to the quantitative one. In large part, these similarities can be attributed to the fact that there are general conventions about how findings should be written up for academic audiences, and these conventions act as a template for, and to some extent restrict, much academic writing. What is striking about the article by Poortinga et al. is their inclination to make as much of the mixed methods status and context of their research as possible, as recommended in the guidelines suggested by Creswell and Plano Clark (2011).

While attention to the writing-up of mixed methods research is an area that is in its infancy, the suggestions of writers mentioned above like Creswell and Tashakkori (2007) and Creswell and Plano Clark (2011) along with strong exemplars like the article by Poortinga et al. provide helpful pointers to the ways in which this task should be approached.



Student experience

Writer's block

Sometimes when writing we feel as though the words will not come out. Rebecca Barnes writes that, when this happened to her, it usually meant that she needed to return to her data to work out what exactly she was trying to say.

There have been frustrating times when I have been unsure of what to write and have spent many hours staring at a largely blank computer screen. I have now realized that when I experience this, it is usually because I need to return to the data and spend more time planning what I want to say, how, and why it matters.

Isabella Robbins's response to similar problems was to try to write every day:

Sometimes just getting words on the page is difficult. I have set myself the task of writing 1,000 words a day, no matter how incoherent they are. I can usually achieve this. I have tried to put the thesis into the realm of 'good enough' and 'the last part of my research training' rather than it being 'something exceptional'.



To read more about Rebecca's and Isabella's research experiences, go to the Online Resource Centre that accompanies this book at: www.oxfordtextbooks.co.uk/orc/brymansrm4e/



Academic writing

When you reach the point that you have to write up your own research, remember that academic writing is a technical form of writing. It has its own conventions, many of which have been covered in this chapter. It is important to follow the guidelines that you have been given by your university, but also to become acquainted with the conventions of academic writing. It is a precise form of writing, and readers can be very unforgiving about vagueness and a failure to incorporate the expected components of academic writing. In addition to taking into consideration the items in the checklist below and the other advice in this chapter, I would strongly recommend reading a few articles to determine such conventions as: how a literature review is presented; how it is linked to research questions; how an argument is constructed and maintained throughout; and what goes into (and indeed does not go into) the presentation of findings, the discussion, and the conclusions. Remember as well

that writing is fundamentally about persuasion. You are trying to convince your readers of the quality of your work and the contribution to understanding you are making. As a result, it is important to write in a way that grabs the reader's attention and interest. All too often, students rush writing up, and this was a recurring theme in many of the accounts that formed the basis for the Student experience boxes. If writing is rushed, there is a risk that insufficient attention will be given to such things as writing style and constructing and maintaining an argument. Also, as I have suggested on several occasions, when presenting your research findings, the conventions of academic writing transcend the quantitative/qualitative/mixed methods distinctions. Finally, do remember that research is a long haul and that, if at all possible, try to find a topic that interests you, because you are much more likely to write about it in an engaged and engaging way.



Tips and skills

How to write an article for *American Anthropologist*

It might appear perverse to have a boxed feature on how to write an article for *American Anthropologist* in a book that is principally aimed at the needs of students and early career researchers. *American Anthropologist* is a long-standing journal that has been in publication since 1888 and is a highly regarded outlet for the work of social anthropologists. Its editor, Tom Boellstorff, has written two articles advising readers how to get an article published in the journal and adds '(or anywhere)'. In other words, what Boellstorff (2008, 2010) aimed to provide was good advice about how to get an article published in most good peer-reviewed journals. What he offers is good advice that transcends both discipline and the style of research (for example, whether quantitative or qualitative or mixed methods). Moreover, it is sound advice to bear in mind for anyone who is writing for an academic audience. He recommends:

1. *Be professional.* Scrutinize your work for typos and grammatical errors. If you have used Word's track changes facility, make sure you have removed all evidence of it by confirming or rejecting all tracked changes.
2. *Link your data and your claims.* Boellstorff claims that one of the most common faults he encounters in his capacity as an editor is that the author's data and what they have inferred from the data are not aligned. Most notably, inferences are not sustainable from the data presented.
3. *Do not make sweeping generalizations.* Sweeping generalizations are far too easy to criticize so they are best avoided. Boellstorff says that articles often begin with such generalizations without any subsequent evidence to sustain them.
4. *Make effective use of citations.* Too often, Boellstorff suggests, authors fail to refer to significant work in the very area they are writing about. It is crucial to refer to the relevant areas of literature.
5. *Make sure that the typescript has an effective structure.* Boellstorff writes that it is crucial to ensure that there is a clear introduction and conclusion and that the intervening sections are well balanced in terms of length.

Also, the thread of the article's core argument needs to be sustained throughout the article. Too often, he says, claims are made at the end of an article for which the prior evidence or reasoning is not apparent.

6. *Demonstrate your contribution.* Make clear what the contribution of your argument and findings is and why it is important to know it. Simply saying something has not been studied before is not sufficient.
7. *Engage with the literature.* It is crucial not just to cite relevant references (see point 4 above) but also to engage with it. Boellstorff suggests it is important to demonstrate a clear familiarity with the classic and more recent literature on a topic. He also recommends emphasizing literature that the author found particularly influential in his or her own thinking and making clear why it is significant. Also, rather than what he calls a 'name-dropping' style of referencing, he advocates drawing out a sense that there is a community of scholars working on a certain topic and demonstrating how your own work will add significantly to that.
8. *Do not give data second hand.* Boellstorff argues that it is crucial to 'show' some of your data. I suspect that Boellstorff had in mind writing up qualitative investigations when he made this point. He suggests that it is important to show some of your interview transcript or field note evidence in the course of writing up, so that statements about what you found can be sustained. In other words, do not just summarize or generalize about what you found. Provide some of the evidence that lies behind what you say you found.
9. *Demonstrate the research methods used.* Be clear about how the data were collected in terms of sampling, measurement of concepts, techniques of data collection, analytic approaches, and so on. Information about when the research was done and over what period are also important to remember. I would add to this point that it is also crucial to justify your research methods. Why was a mail questionnaire or semi-structured interview used? Why are these documents appropriate to this research question?
10. *Keep revising.* Boellstorff suggests that revising should be a core element of writing. Your written output should be reread and revised on at least one occasion (and preferably more). Revising allows internal inconsistencies, poor phrasing, breaks in the argument, and key items of missing information to be addressed.



Student *and* supervisor experience

Being interested

Alexandra Scherer was drawing on experience with her master's dissertation on children's responses to representations of the child in award-winning picture books when she wrote:

Make sure you have picked something you are fascinated in as your research question and topic, and that it is feasible to do in the time frame you have allocated, because if you are anything less than fascinated you will end up hating it by the end, and even if you are fascinated in it, there will still be times in the long process where you feel that there is no point in it and that what you have done is worthless! Everyone loses a sense of perspective about their research project at some point!

William Mason, when asked one bit of advice he would give to students beginning a research project, replied in similar terms:

Choose something you enjoy and make it yours! This is your chance to be self-indulgent with your studies. Your dissertation is probably the longest piece of academic work you will have ever done and it's going to be a real slog if you choose the wrong topic. If you can choose a topic that suits you, you'll enjoy the process and this will almost definitely be reflected in your marks.

Similar views were expressed by several of the supervisors. They were asked what personal qualities and types of behaviour make for a successful dissertation student. Supervisor F replied:

It would be fair to say, *pace* Blair, 'interest, interest, interest'—there is a strong correlation between how interested the student is in a topic, his or her engagement with the research process, and a quality outcome.

Similarly, Supervisor G wrote:

A student has to want to write something like a dissertation or doctorate for more than a qualification. It has to be personal to be enjoyable.



Checklist

Issues to consider for writing up a piece of research

- ☐ Have you clearly specified your research questions?
- ☐ Have you clearly indicated how the literature you have read relates to your research questions?
- ☐ Is your discussion of the literature critical and organized so that it is not just a summary of what you have read?
- ☐ Have you clearly outlined your research design and your research methods, including:
 - ☐ why you chose a particular research design?
 - ☐ why you chose a particular research method?
 - ☐ how you selected your research participants?
 - ☐ whether there were any issues to do with cooperation (for example, response rates)?
 - ☐ why you implemented your research in a particular way (for example, how the interview questions relate to your research questions, why you observed participants in particular situations, why your focus group guide asked the questions in a particular way and order)?
 - ☐ if your research required access to an organization, how and on what basis was agreement for access forthcoming?
 - ☐ steps you took to ensure that your research was ethically responsible;
 - ☐ how you analysed your data?
 - ☐ any difficulties you encountered in the implementation of your research approach.
- ☐ Have you presented your data in a manner that relates to your research questions?
- ☐ Does your discussion of your findings show how they relate to your research questions?
- ☐ Does your discussion of your findings show how they shed light on the literature that you presented?
- ☐ Are the interpretations of the data that you offer fully supported with tables, figures, or segments from transcripts?
- ☐ If you have presented tables and/or figures, are they properly labelled with a title and number?
- ☐ If you have presented tables and/or figures, are they commented upon in your discussion?
- ☐ Do your conclusions clearly allow the reader to establish what your research contributes to the literature?
- ☐ Have you explained the limitations of your study?
- ☐ Do your conclusions consist solely of a summary of your findings? If they do, rewrite them!
- ☐ Do your conclusions make clear the answers to your research questions?
- ☐ Does your presentation of the findings and the discussion allow a clear argument and narrative to be presented to the reader?
- ☐ Have you broken up the text in each chapter with appropriate subheadings?
- ☐ Does your writing avoid sexist, racist, and disablist language?
- ☐ Have you included all appendices that you might need to provide (for example, interview schedule, letters requesting access, communications with research participants)?

- ☐ Have you checked that your list of references includes *all* the items referred to in your text?
- ☐ Have you checked that your list of references follows precisely the style that your institution requires?
- ☐ Have you followed your supervisor's suggestions when he or she has commented on your draft chapters?
- ☐ Have you got people other than your supervisor to read your draft chapters for you?
- ☐ Have you checked to ensure that there is not excessive use of jargon?
- ☐ Do you provide clear signposts in the course of writing, so that readers are clear about what to expect next and why it is there?
- ☐ Have you ensured that your institution's requirements for submitting projects are fully met in terms of such issues as word length (so that it is neither too long nor too short) and whether an abstract and table of contents are required?
- ☐ Have you ensured that you do not quote excessively when presenting the literature?
- ☐ Have you fully acknowledged the work of others so that you cannot be accused of plagiarism?
- ☐ Is there a good correspondence between the title of your project and its contents?
- ☐ Have you acknowledged the help of others where this is appropriate (for example, your supervisor, people who may have helped with interviews, people who read your drafts)?



Key points

- Good writing is probably just as important as good research practice. Indeed, it is probably better thought of as a part of good research practice.
- Clear structure and statement of your research questions are important components of writing up research.
- Be sensitive to the ways in which writers seek to persuade us of their points of view.
- The examination of writing strategies generally teaches us that social scientists do more than simply report findings. Writing is designed to convince and to persuade.
- Writing is about persuasion. We all want to get our points across and to persuade our readers that we have got things right. We need to ask: Do we do it well? Do we make the best possible case? We all have to persuade others that we have got the right angle on things; the trick is to do it well. So, when you write an essay or dissertation, do bear in mind the significance of your writing strategy.



Questions for review

- Why is it important to consider the ways in which social research is written up?

Writing up your research

- Why is it important to be clear about your main argument when writing up your findings?

Writing up quantitative research

- Read an article based on quantitative research in a British sociology journal. How far does it exhibit the same characteristics as Kelley and De Graaf's (1997) article?

- What is meant by rhetorical strategy? Why might rhetorical strategies be important in relation to the writing-up of social research?

Writing up qualitative research

- Read an article based on quantitative research in a British sociology journal. How far does it exhibit the same characteristics as the article by Jones et al. (2010)?
- How far is the structure of the article by Jones et al. different from Kelley and De Graaf's?
- If you were writing up the results of a qualitative interview study you had undertaken, what would be your approach to using (or indeed not using) verbatim quotations from your transcripts?

Writing up mixed methods research

- Read an article based on quantitative research in a British sociology journal.
- How far does it exhibit the same characteristics as the one by Poortinga et al.?
- How far does it succeed in integrating the quantitative and the qualitative findings?

Academic writing

- Outline some of the chief ways in which academic writing is distinctive.



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